

No. 23-1501

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**UNITED STATES COURT OF APPEALS  
FOR THE FIRST CIRCUIT**

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NANTUCKET RESIDENTS AGAINST TURBINES; VALLORIE OLIVER,

*Plaintiffs - Appellants,*

v.

U.S. BUREAU OF OCEAN ENERGY MANAGEMENT; NATIONAL OCEANIC  
AND ATMOSPHERIC ADMINISTRATION; NATIONAL MARINE FISHERIES  
SERVICE; DEBRA HAALAND, Secretary of the Interior; GINA M.  
RAIMONDO, Secretary of Commerce; VINEYARD WIND 1, LLC,

*Defendants - Appellees.*

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On Appeal from the United States District Court for the District of Massachusetts,  
No. 1:21-cv-11390-IT – Hon. Indira Talwani

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**REPLY BRIEF OF APPELLANTS, NANTUCKET RESIDENTS AGAINST  
TURBINES, ET AL.**

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## INTRODUCTION

The National Marine Fisheries Service (“NMFS”) contravened the Endangered Species Act (“ESA”), 16 USCS § 1536(a)(2), and the Administrative Procedures Act (“APA”), 5 U.S.C. § 701-706, through its failure to adequately consider Vineyard Wind I project’s (“project”) impact on the North Atlantic Right Whale (“NARW”) and instead concluding that the project would not jeopardize them. The Bureau of Ocean Energy Management (“BOEM”) violated the ESA and APA through reliance on the legally deficient Biological Opinion (“BiOp”) when approving the project’s Construction and Operations Plan. Both agencies violated and continue to contravene the ESA and APA by failing to ensure through consultation that the project’s impacts do not jeopardize the NARW. BOEM violated NEPA by abdicating their duty to take a hard look at the environmental consequences to NARWs, and issuing a Final Environmental Impact Statement (“FEIS”) that strongly relied upon the flawed BiOp.

Federal Defendants’ and Intervenor-Defendants Opposition Briefs do not refute ACK RATs’ contentions regarding the agencies’ failure to utilize the best scientific data available and adequately consider numerous important facts regarding NARWs in the context of the project. As explained *infra*, Appellees’ arguments are unavailing, and do not directly address ACK RATs’ contentions and concerns. The

agencies failed to consider salient aspects of the project, the risks associated therewith, and offered explanations that run counter to the evidence before them.

## **ARGUMENT**

### **I. NMFS AND BOEM CONTRAVENED THE ESA THROUGH THEIR LEGALLY INADEQUATE ANALYSIS OF THE PROJECT'S EFFECTS ON THE NORTH ATLANTIC RIGHT WHALE**

#### **A. NMFS FAILED TO UTILIZE THE BEST AVAILABLE SCIENTIFIC DATA IN ITS ASSESSMENT OF THE BASELINE STATUS AND DISTRIBUTION OF THE NORTH ATLANTIC RIGHT WHALE**

Appellees aver that NMFS properly considered and relied upon the best scientific data available, (Fed. Def. Opp. Br. 19-22), “NMFS extensively explained the status, life history, population dynamics, and threats faced by right whales, relying on the best available scientific and commercial data, including the 2020 “annual report card”... and the 2020 marine mammal stock assessment report.” Fed. Def. Opp. Br. 19.

But this is apocryphal. The portions of the BiOp to which Appellees cite do not, in fact, disclose the facts underscored by ACK RATs. The BiOp, at SA 421, provides that “between 1992 and 2016, North Atlantic right whale calf counts *increased* at a rate of 1.98% per year.” And in a footnote, at SA 421, states, “based

on information in the North Atlantic Right Whale Catalog, the mean calving interval is 4.69 years.” Nowhere at SA 421-22 does the BiOp discuss the ramifications of the calving interval for NARWs of 7.6 years (which is defined as the time period from the birth of one calf to the next); nor does it mention or discuss the implications of the fact that “detected mortalities outnumbered births 3:2.” APPX. 000144, APPX. 000148 – table 2.

The BiOp does not disclose that the NARWs’ potential biological removal level (“PBR”) has fallen to 0.8. Nowhere at SA 421-22 does the BiOp discuss the 2020 annual report card or 2020 marine mammal stock assessment report; in fact, all the BiOp does is merely mention the overall decline of the NARW population. At SA 419-20, while the BiOp mentions the 7.6-year calving interval in an ephemeral string citation of studies on calving interval, it does not expound upon the relevance of this significant increase in calving interval. It does not contextualize the significantly increased calving interval in view of the much-heightened presence of NARWs in the RI/MA wind energy area. Appellant’s Br. 16 (citing APPX.000455).

Mere mention of information is not tantamount to “use” or “consider” within the meaning of 50 CFR 402.14(g)(8).<sup>1</sup> NMFS failed to cite integral information

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<sup>1</sup> “In formulating its biological opinion, any reasonable and prudent alternatives, and any reasonable and prudent measures, the Service will use the best scientific and commercial data available and will give appropriate consideration to any beneficial actions as proposed or taken by the Federal agency or applicant.” 50 CFR 402.14(g)(8).

about the NARWs status, and the information it did cite, was not actually “used” or “considered” concordant with the meaning of those words. Appellant’s Br. 20.

While Appellees assert, Fed. Def. Opp. Br. 19, that NMFS discussed NARW mortalities documented in 2020, it is irrefragable that the BiOp does not disclose the salient fact that at least 16 of the 327 identified NARWs were confirmed dead to the NARWC as of December 2020. Appellant’s Br. 16 (citing APPX. 000455). Conversely, Appellees point to the fact that NMFS notes two confirmed dead NARWs and three confirmed serious injuries. Fed. Def. Opp. Br. 20. This delta is notable in view of the already highly diminutive population numbers, as 16 deaths of 327 identified (and the language utilized in the QR study was **at least** 16 deaths) constitutes approximately 5% of the existing NARW population. Such a failure to acknowledge, appreciate, and consider the implications of those numbers amounts to one of many derelictions in the environmental review.

And while NMFS “cites” to the 2020 annual report card, SA 786, it does not “rely on it” as Appellees aver, Fed. Def. Opp. Br. 20. Mere citation to a study in the references section does not constitute reliance or consideration for that matter. The above cited datapoints are either insufficiently acknowledged or not acknowledged at all in the BiOp’s discussion through the pages to which Appellee’s cite, SA, 419-25.



With respect to the 2020 stock assessment report, Appellees assert that the NMFS “relies upon it” (Fed. Def. Opp. Br. 20), but again, the BiOp, at SA 424, SA 481-82, does not acknowledge or discuss the highly important point elucidated in the stock report, namely, “In addition, right whales apparently abandoned the Jordan Basin in the central Gulf of Maine in winter (Cole et al. 2013), but have since been seen in large numbers in a region south of Martha’s Vineyard and Nantucket Islands (Leiter et al. 2017).” Appellant’s Br. 19 (citing 2020 stock assessment report, p. 12). The BiOp entirely fails to discuss the ostensible alteration in the NARWs’ population dynamics in the Northeastern coastal waters, such that large numbers of the whales are now within and highly proximate to the very areas under construction for Vineyard’s project.

It is not sufficient – pursuant to the statutory and regulatory stipulation of the ESA – to merely cite studies in parentheses and reference section(s). The available data must be utilized and carefully considered to inform and direct the agency’s determinations. NMFS abdicated its duty to engage in this consideration of the data in numerous respects here. Appellees insist that BOEM relied upon the 2020 report (Fed. Def. Opp. Br. 21, n. 9), but this is counterfactual. The Merriam-Webster definition of “rely” is “to be dependent.” It is ostensible that the NMFS certainly does not “depend” on the integral facts cited above in the 2020 report and stock

assessment. Again, mere passing reference of studies (devoid of substantive discourse and consideration) is not tantamount to dependence.

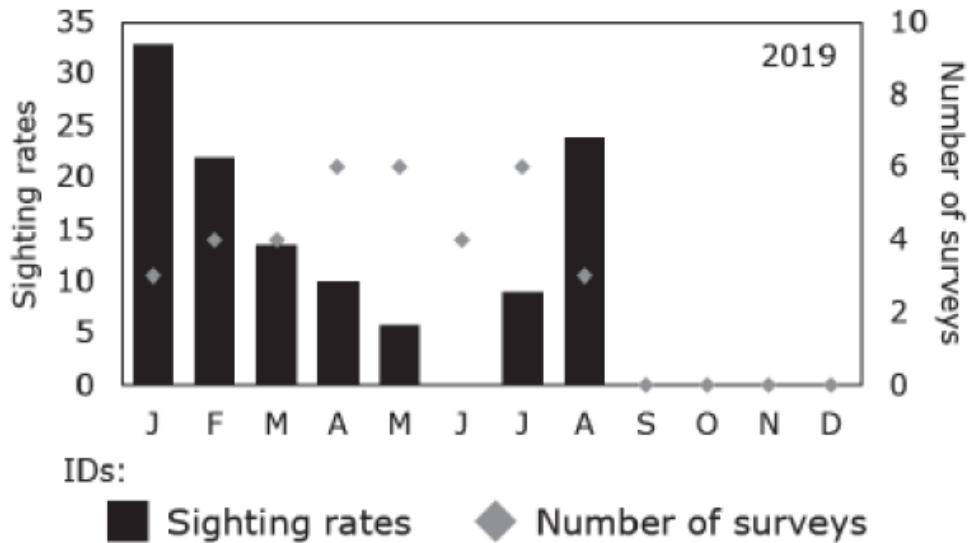
Appellees cite to SA 481-82 and SA 485 in support of their assertion that NMFS was aware of the year-round presence of NARWs in the wind development area. Fed. Def. Opp. Br. 22. But the verbiage cited at SA 481 and at SA 485 significantly underemphasizes and underestimates this year-round presence, contrasted with the data derived from the QR study.

**Table 6.1 Estimated densities (animals/100km<sup>2</sup>) of NARW used for modeling marine mammal exposures for monopile installation (Table 9 in the Notice of Issued IHA)**

Species	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec	Annual Average*
North Atlantic right whale	0.51	0.646	0.666	0.599	0.204	0.016	0.002	0.001	0.002	0.007	0.053	0.274	0.248

The BiOp at SA 485 (above table derived therefrom) explains, “**March** is the month with the highest density of right whales in the lease area and that overall, North Atlantic right whales are most likely to occur in the lease area from December through May, with the highest probability of occurrence extending from January through April.” But yet the QR study explains that “NARW sighting rates were **high during the summer months**” (Appellant’s Br. 16-17 citing APPX.000456), and the QR study tabled data (APPX. 000456, table reproduced below) is redolent of the fact

that June sighting rates were comparable with April, and August sighting rates were far above that of March, and in fact, constitutes the second highest rates of the entire calendar year. It clear that the BiOp did not sufficiently account for these data.



Appellees aver that NMFS “thoroughly considered the Quintana-Rizzo study” purporting that NMFS cited it numerous times. Fed. Def. Opp. Br. 23. But on none of these cited pages (SA 483, SA 485, SA 550-51, SA 656), does the BiOp acknowledge the fact that NARW sighting rates in 2019 were significantly higher than prior years. In fact, the sighting rates in 2019 were substantially greater than even 2018. APPX. 000456. The trend in unique NARW identifications delineated in the QR study evinces this. The NARW unique IDs are denoted in the following table (APPX.000458):

B: Unique IDs and resightings by year

Parameter	2011	2012	2013	2014	2015	2017	2018
Unique IDs	53	22	20	43	53	122	202
Resightings in the same season	12	0	0	3	2	43	87
Resightings among seasons	0	0	0	0	2	13	44

The unique NARW IDs increased from 20-55 in 2011-2015 to 122 in 2017 and 202 in 2018, which constitutes a 165% increase over the course of one, sole year. These salient details were not discussed by NMFS in the BiOp.

Moreover, Appellees attempt to restrict NARW distribution to areas proximate to, but not overlapping with, the wind development area where Vineyard Wind I is located. Fed. Def. Opp. Br. 24. However, this too, is a spurious claim. The QR study to which ACK RATs cited repeatedly in its Opening Brief highlights the fact that the Vineyard Wind Development Area *is* a right whale hotspot APPX.000457.

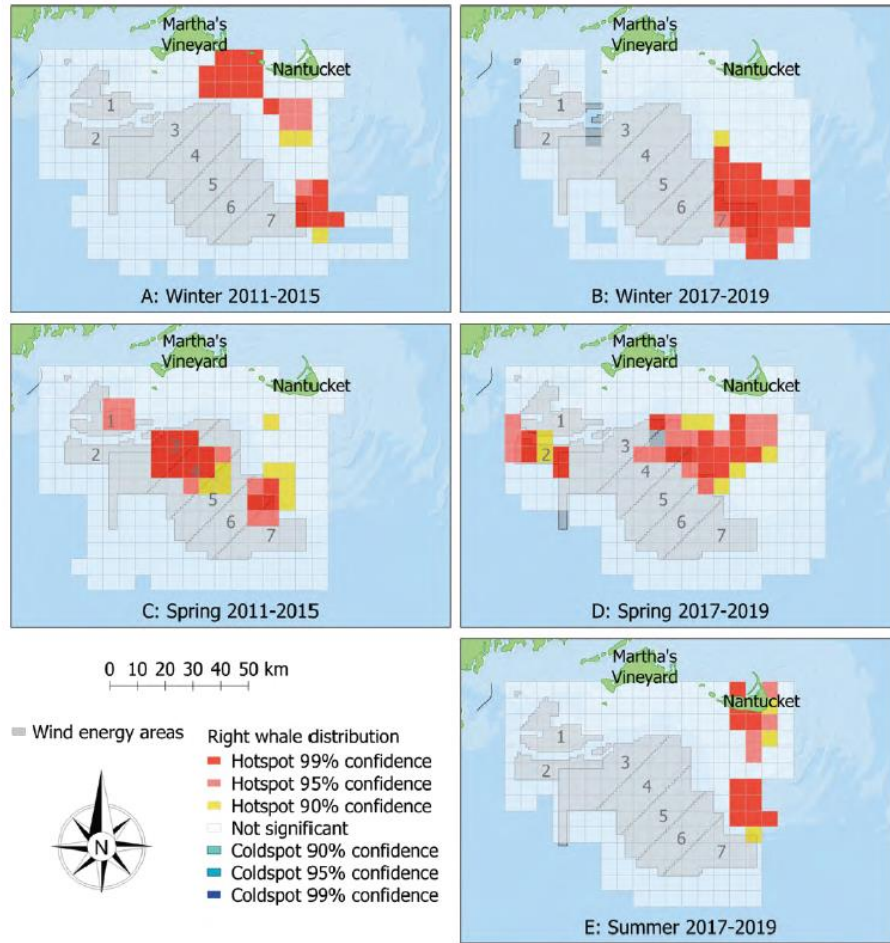


Fig. 5. Hotspot analysis of right whale seasonal distribution in the study area (A,C: 2011–2015; B,D,E: 2017–2019), with hotspots based on significantly higher values than surrounding areas. No coldspots were identified. Wind energy area lease zones are identified by numbers. Additional details of the study area are shown in Fig. 1

While hotspot permutations are apparent throughout the years, what is also ostensible is the fact that all of these permutations 2011-2019 involve varying spatial degrees of the wind energy area.<sup>2</sup> Appellees’ contention that NARW hotspots are

<sup>2</sup> Intervenor-Defendant Appellees’ Br. at 13 fails to understand a critical point, which they overlook in their explanation of the QR data. The spatiotemporal variance of NARW hotspot distribution *includes* the Project area, and further, “the discovery curve had a steep slope during the 2011-15 surveys and was even steeper in 2017-

adjacent to, but not overlapping with, the Vineyard Wind project area is discordant with the data demonstrated by the QR study. *Id.*

**B. NMFS FAILED TO EMPLOY THE BEST AVAILABLE SCIENTIFIC DATA IN THEIR ASSESSMENT OF MITIGATION PROTOCOLS, EXPOSURE OF WHALES TO PILE DRIVING NOISE, RISKS OF ENTANGLEMENT, OPERATIONAL NOISE, AND ADDITIVE RISKS IN THE CONTEXT OF THE PROJECT**

**1. PILE DRIVING**

As an initial matter, Federal-Defendant and Intervenor-Defendant Appellees misapprehend (Inv. Def. Opp. Br. 21, and Fed. Def. Opp. Br. 32) the meaning of the Level A harassment cumulative exposure, 7.25 km isopleth, which serves as the spatial extent of noise emanated from pile driving of jacket foundations. Appellees aver that the 7.25 km is redolent of the distance at which the animal would have to remain during the installation of all four piles, and further that the 7.25 km area corresponds to the area within which Level A harassment would occur after

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18, suggesting an open population or that sightings in the area were underestimated . . . *Feeding was observed in all seasons* and years [emphasis added].” APPX. 000455. Moreover, in their discussion of sighting rates, they gloss over the fact that August’s sighting rates are the second greatest of any month in the calendar year, precisely within the window of construction season.

cumulative exposure during a 24-hour period. Opp. Br. 32. The Appellees made this same, erroneous argument at the District Court Motion Hearing.<sup>3</sup> APPX. 000078-80.

The sound exposure level represents the “total energy in a stated frequency band over a stated time interval or event . . . SEL is a cumulative metric; it can be accumulated over a single pulse, or calculated over periods containing multiple pulses. Cumulative SEL represents the total energy accumulated by a receiver over a defined time window or during an event.” Importantly, see SA 0063, which explains that the whale’s received sound exposure levels are summed over a specified duration to determine its total received energy, and the modelling for this value **incorporates the assumption of the whales entering and departing the modeled ensonified area**. In other words, the SEL, cumulative exposure value at 7.25 km from jacket pile driving (see, SA 0061), **incorporates the assumption of whales moving into and out of the ensonified zone**.<sup>4</sup>

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<sup>3</sup> “It’s a 24-hour cumulative assessment . . . They’re not going to be exposing the whales to 24 hours of noise.” Intervenor-Defendant Counsel, APPX. 000078-80.

<sup>4</sup> “It is important to note that the model accounts for the acoustic energy that an animal accumulates *even if that animal departs the ensonified area prior to the full 24 hours* (i.e., even if the animal departs prior to a full 24 hour modeled period, if that animal accumulated enough acoustic energy to be taken, it is accounted for in the take estimate [emphasis added].” SA 0063.

As such, it is misleading to describe the Level A harassment contour as Appellees do. Notwithstanding that, even if, arguendo, the import of the Level A harassment were as Appellees propound (which it is not), they have no means of demonstrating that whales will in fact exit the 7.25 km contour in any given 24-hour period.

The primary linchpin of the Appellees' argument in terms of obviating Level A harassment takes is the efficacy of the various mitigation protocols (Fed. Def. Opp. Br. 27, "incidental harassment authorization did not authorize any Level A harassment of right whales, however, because NMFS determined that all Level A harassment would be avoided through additional mitigation and monitoring measures"), and accordingly, it is integral that ACK RATS, again, direct the Court to their lack of utility.

By way of quick review, Vineyard Wind uses passive acoustic monitoring ("PAM") for NARW detection, clearance and shut-down. They must establish a NARW monitoring zone of 5 km from the pile driving location. Within that contour, Vineyard implements "clearance activities" such as soft-starts and PAM. The PAM clearance zone is 5 km for monopiles and 3.2 km for jacket foundations (clearance zone is established before pile driving begins, shutdown occurs during pile driving). However, the shutdown zone extends to only 3.2 km (i.e., even if a whale is detected beyond 3.2 km, there will be no shut-down during pile driving activity). Note, again,



that the Level A harassment noise isopleth extends to 7.25 km. Protected Species Observers (“PSO”) only have the ability to “see” out to 1.5 km or less, and that’s only if the whales are at the water’s surface (and visibility if good - no fog, sufficient light, calm seas).

Appellees propound the fallacious argument that ACK RATs have either waived or forfeited certain points related to mitigation protocols. Fed. Def. Opp. Br. 33, n. 14-15. Specifically, with respect to the efficacy of PAM and PSOs, Appellees aver that ACK RATs never raised this information in comments to NMFS or notice of intent to sue. *Id.* But this claim is spurious as ACK RATs apprised NMFS of its concerns regarding the mitigation protocols, including PSOs and PAM, at innumerable points throughout their notice of intent to sue letters.<sup>5</sup> These letters very thoroughly addressed ACK RATs’ contentions regarding the efficacy issues of both PAM and PSOs, and thus, ACK RATs certainly apprised the agency of its positions in a timely manner. *Quincy Commerce Ctr. v. Mar. Admin.*, 451 F.3d 1, 6 (1<sup>st</sup> Cir. 2006); see also, *Cook Inletkeeper v. Raimondo*, 533 F. Supp. 3d 739, 750 (D. Alaska 2021) (explaining that plaintiffs need only raise an issue with sufficient clarity to

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<sup>5</sup> See, District Court notice of intent to sue documents, ECF 96-3, paragraphs 58, 62, 63, 65, 101, 119, and ECF 96-2, paragraphs 12, 19, 20, 21, and 40. At numerous points in these intent to sue documents, ACK RATs clearly impugns the efficacies of PSO and PAM, noting various deficiencies associated with same. The agencies were on notice and apprised of ACK RATs’ significant concerns regarding the ineffectiveness of these putative mitigation protocols.

allow the decision maker to understand). NMFS was clearly informed and advised of ACK RATs assertions that the mitigation protocols, including PAM and PSOs, were inadequate and ineffective; the claims in ACK RATs' Opening Brief closely correspond with those contentions.

As to the merits of Appellees' arguments, ACK RATs does not, as Appellees assert (Fed. Def. Opp. Br. 33) "overlook" other monitoring components. Conversely, ACK RATs not only acknowledged the other monitoring and mitigation procedures, but assiduously impugned their respective efficacies and utility. Appellant's Br. 22-28. Appellees' argument that the PAM and PSO limitations discussed in other cases are for different projects and thus should be discarded – is irrelevant. Fed. Def. Opp. Br. 33-34, n. 14-15. The PAM utilized in those situations (Appellant's Br. 25-26), is no different than that which is employed in Vineyard Wind's project, "A Passive Acoustic Monitoring (PAM) system will be used by trained PAM operators to monitor for acoustic detections of vocalizing whales." SA 0103.

Thus, the same concerns are translatable and applicable: auditory masking via background noise, the received levels biological noise must exceed background/measurement noise, the whales must be actively vocalizing, and must be of sufficient amplitude to be detected at the monitoring location. Appellant's Br. 25-26. The efficacies of PAM (25%), and PSOs (9%), respectively, were derived directly from a NMFS final rule discussing the mitigation protocols. Appellant's Br.

26 (citing *NRDC v. Pritzker*, 62 F. Supp. 3d 969 (N.D. Cal. 2014) (quoting 77 FR 50290)). Accordingly, PAM's maximum hypothetical potential is the putative detection of whales out to 3.2 km (jackets) and 5 km (monopiles) for clearance, and 3.2 km for shut-down, while PSO's maximum hypothetical potential is the detection of whales out to 1.5 km. PAM only imparts 25% efficacy and PSO 9%, which means there's a mere overlapping efficacy (PAM + PSO) of 34% in the < 1.5 km contour.

And of course, neither (ineffective) mitigation protocol extends into the 3.2 km – 7.25 km region of Level A harassment noise during shut-down. These facts should incontrovertibly be characterized as poor efficacy. Given these protocols form a substantial predicate of NMFS' lack of Level A harassment takes (Fed. Def. Opp. Br. 27), and a fortiori, the “no jeopardy” conclusion pursuant to the ESA, their lack of efficacy (both individually and synergistically) serves to seriously undermine the validity of the “no jeopardy” conclusion.

Appellees implicitly concede that the soft-start measure imparts no efficacy (Fed. Def. Opp. Br. 35), as the NMFS could not definitively modify estimated take numbers as a function of it, “we are not able to modify the estimated take numbers to account for any benefit provided by the soft start.” Appellant's Br. 27, citing APPX. 000900. The notion advanced by Appellees that the soft-start may reduce duration of exposure to pile driving noise (Fed. Def. Opp. Br. 35) is pure speculation,

and the NMFS' lack of adjustment of the take numbers evinces the very low confidence associated with soft-starts as a mitigation protocol.

Regarding other mitigation protocols outlined at Fed. Def. Opp. Br. 28-29, ACK RATs has shown that the seasonal restriction, constraining pile driving to May 1 through December, entirely fails to acknowledge the data from the QR study depicting high NARW sighting rates in the summer months, with August featuring the second highest sighting rates of the calendar year (see, *supra*).

Furthermore, ACK RATs demonstrated in their Opening Brief that the vessel speed restriction to 10 knots (noted by Appellees at Fed. Def. Opp. Br. 29) is grossly inadequate due to the fact that the majority of the Vineyard Wind I project's anticipated vessel trips consist of crew transfer vessels, which are exempt from the 10-knot stipulation, and can travel at 25 knots. This supersedes the 15-knot threshold known to be 100% fatal to NARWs. Appellant's Br. 25. Appellees' sole rebuttal to this argument is that "mandatory observers located onboard exempted vessels" will facilitate detection of whales. Fed. Def. Opp. Br. 42. But as already described *supra*, these observers have significant limitations, which even Appellees concede to a certain degree (Fed. Def. Opp. Br. 42). Their detection efficacy is limited to 9%; they can only see in good daylight conditions, and their mere opportunity (a small one at that) to detect a whale is if it happens to be traveling near the surface of the water.

## 2. ENTANGLEMENT

Appellees posit a number of incorrect arguments regarding the risk of entanglements exacerbated by the project. First, they ignore the enhanced risk posed to NARWs via the trap surveys.<sup>6</sup> The placement of lobster/crab pots at numerous locations within the Wind Development Area (WDA) to monitor the Project's impacts on local fisheries will increase the risk of entanglement.<sup>7</sup> Appellees note that the TRT memorandum is listed as a reference, Fed. Def. Opp. Br. 36, but as discussed, this is not tantamount to **consideration or use** of that memorandum. Specifically, the BiOp fails to analyze key concerns broached by the memo such as: "Area 537 (the fishing area south of Nantucket and Martha's Vineyard) was of particular concern to conservationists, as recent observations suggest that this area has a much higher density of whales and is fished with heavy gear by the offshore

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<sup>6</sup> "Vineyard Wind will conduct ventless trap surveys to assess lobster and crab resources and a pot survey to assess black sea bass resources in the Vineyard Wind WDA and control sites adjacent to the WDA and to evaluate the differences between pre (2 years), during (1 year), and post-construction (3 years). To assess lobster and crab resources, a total of 30 sampling stations/strings of traps will be selected and split evenly between the Vineyard Wind WDA and the adjacent control area." SA 0667.

<sup>7</sup> "This "Area 537" is replete with commercial fishing operations which pose a risk to NARWs, including "approximately 987 to 2,650 vertical [buoy] lines" in the water at a given time, with the highest number, 1,717 to 2,650 lines, fixed in place May-October, a time period congruous with Project pile driving." Appellant's Br. 18 citing APPX. 000753 - APPX. 000755, APPX. 000748, APPX. 001022.

lobster fleet.” APPX.000133. The BiOp fails to discuss the TRT Key Outcomes Memorandum, in particular, the role of Area 537 in the context of increased entanglement risks exacerbated by the Vineyard Wind Project.

Pile-driving will likely cause many NARWs to travel into the heavy fishing zone of Area 537, but the BiOp fails to consider this. Appellees postulate that whales impacted by pile driving noise will already be located within Area 537, since the wind development area is within it. But this is a non-sequitur. By compelling whales out of the wind development area (which is within Area 537), the *density* of those whales will likely increase in portions of Area 537 which feature heavy fishing activities. In other words, rather than a comparatively lower density dispersal of whales (absent any pile driving noise), the whales will likely be distributed across a smaller spatial extent of water due to this noise.

While Appellees aver that ACK RATs “incorrectly contend that NMFS dismissed entanglement risks generally” (Fed. Def. Opp. Br. 38), earlier in Appellees’ Opposition Brief, they note that the NMFS maintains entanglement “remains a relatively rare event.” Fed. Def. Opp. Br. 20 (citing SA 669).<sup>8</sup> This

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<sup>8</sup> “The Environmental Impact Statement (EIS) prepared for the Atlantic Large Whale Take Reduction Plan (ALWTRP EIS, NOAA 2021b) determined that entanglement in commercial fisheries gear represents the highest proportion of all documented serious and non-serious incidents reported for North Atlantic right and fin whales. However, entanglement remains a relatively rare event, with approximately 8

underestimates the threat of entanglement significantly, particularly in view of the data ACK RATs presented in their Opening Brief at 28-29. How can entanglement be characterized as relatively rare when 48 NARW entanglement deaths were recorded 2010-18, and 93% of the existing NARW population was identified in the Rhode Island-Massachusetts Wind Energy Area? Appellant’s Br. 29. And moreover, the observed NARW deaths only constitute 36% of actual deaths. *Id.*

Intervenor-Defendant Appellees misconceive ACK RATs’ argument when they assert that ACK RATs “cannot raise new arguments or cite new, non-record evidence on appeal.” Inv. Def. Opp. Br. 17, n. 3. ACK RATs is citing *new authority* which supports the already existing propositions that ACK RATs advanced in the District Court regarding the heightened risks of entanglement augmented and exacerbated by the Vineyard Wind project. As Courts have held, including in the First Circuit, citing *new authority* on appeal must be distinguished from raising a *new issue*, the latter of which ACK RATs has not done. *Alston v. Town of Brookline*, 997 F.3d 23 (1<sup>st</sup> Cir. 2021) (citing *Metavante Corp. v. Emigrant Sav. Bank*, 619 F.3d 748, 773 n.20 (7th Cir. 2010), finding an issue preserved because it was raised below and highlighting that a litigant may cite new authority on appeal). See also, *United States v. Rapone*, 131 F.3d 188, 196, (D.C. Cir. 1997) (distinguishing between raising

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entanglements a year of right whales estimated along the entire U.S. and Canada Atlantic coast (Hayes et al. 2020).” SA 669.

new issue and citing new authority on appeal). Concordantly, here, ACK RATs has not raised any new issues, they have merely cited new authority which supports their existing propositions, including that the entanglement risk posed to NARW is materially higher than the agencies presume.

### **3. OPERATIONAL NOISE**

Appellees assert that NMFS' determination to assign very little weight to the Stober study should be afforded deference. But agency determinations cannot merely be "rubber stamped," as such decisions must still be rational. *Citizens Awareness Network v. United States Nuclear Regulatory Comm'n*, 59 F.3d 284, 290 (1<sup>st</sup> Cir. 1995). These agency determinations must be overturned if they "failed to consider an important aspect of the problem, or offered an explanation 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." *Conservation Cong. v. United States Forest Serv.*, 720 F.3d 1048 (9th Cir. 2013)

Appellees aver that because Stober was not an in-situ evaluation of underwater noise, it lacked context to be useful. Fed. Def. Opp. Br. 41. NMFS' decision to discard Stober is suspect for the following reasons.



In addition to the reasons delineated in Appellant's Br. 20-21,<sup>9</sup> it should be noted, as an initial matter, that the NMFS readily accepts modelling data in numerous other contexts of NARW analysis, such as right whale distribution (Fed. Def. Opp. Br. 21, habitat-based density models that incorporate sighting data) and acoustic monitoring (Fed. Def. Opp. Br. 25, pile driving noise – acoustic modelling for maximum and most likely designs). Yet, here, Appellees assert that the lack of in-situ evaluation renders Stober of little value.

NMFS contends that the similarity in location is the primary reason for its reliance on the Block Island Wind Farm study, but location, is not the only determinant, and the size, number, and power of those turbines are far more integral determinants. Vineyard Wind will construct up to 84 turbines, each with a power capacity of 14 MW, which constitutes large, industrial scale turbines, precisely what Stober analyzed (i.e., turbines of power capacities 10 MW plus at industrial scale wind farms). Block Island's Wind Farm only contains 5 wind turbine generators,

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<sup>9</sup> There is an apparent inconsistency in the manner whereby the NMFS analyzes available data. They assign little weight to the 2020 Stock Assessment because the data therein was purportedly derived from 2018, and so the NMFS chose to rely on more recent study data. But in the context of operational noise, NMFS discards Stober, the more recent study (2021), in favor of Elliot, the less recent study (2019). There is no compelling reason why NMFS should discard the conclusions of Stober, and NMFS does not offer same.

each with a 6 MW power capacity. This is hardly an accurate proxy for Vineyard Wind.

Additionally, NMFS incorrectly and inappropriately discounts the utility of Stober. The very issues described by Stober are applicable to the project, namely:

“For impact pile driving, sound levels increase with pile diameter and thus with overall size and nominal power output. A similar relationship exists between operational noise and wind turbine size.” APPX.000589

“Furthermore, it is important to consider that most of the energy of operational noise is in the lower frequency range (i.e., well below 1kHz). Many of the offshore wind farms planned beyond Europe overlap with essential habitats of baleen whales and fishes that are suspected to be sensitive at those frequencies.” APPX.000589

“With the potentially larger impact ranges for larger wind turbines, impact zones will be more likely to overlap and form one impact area that might cover the whole wind farm.” APPX.000592

And as such, the Stober study’s analysis is highly apposite to Vineyard Wind’s project, *inter alia*, Vineyard increased the size of its turbines from 10 MW to 14 MW.<sup>10</sup> Such power capacities much more closely approximate the capacities examined in Stober, rather than the capacities attendant the Block Island wind farm. NMFS refrained from discussing these data, data which evinced the potential for much greater impact zones as a function of larger, higher power capacity turbines.

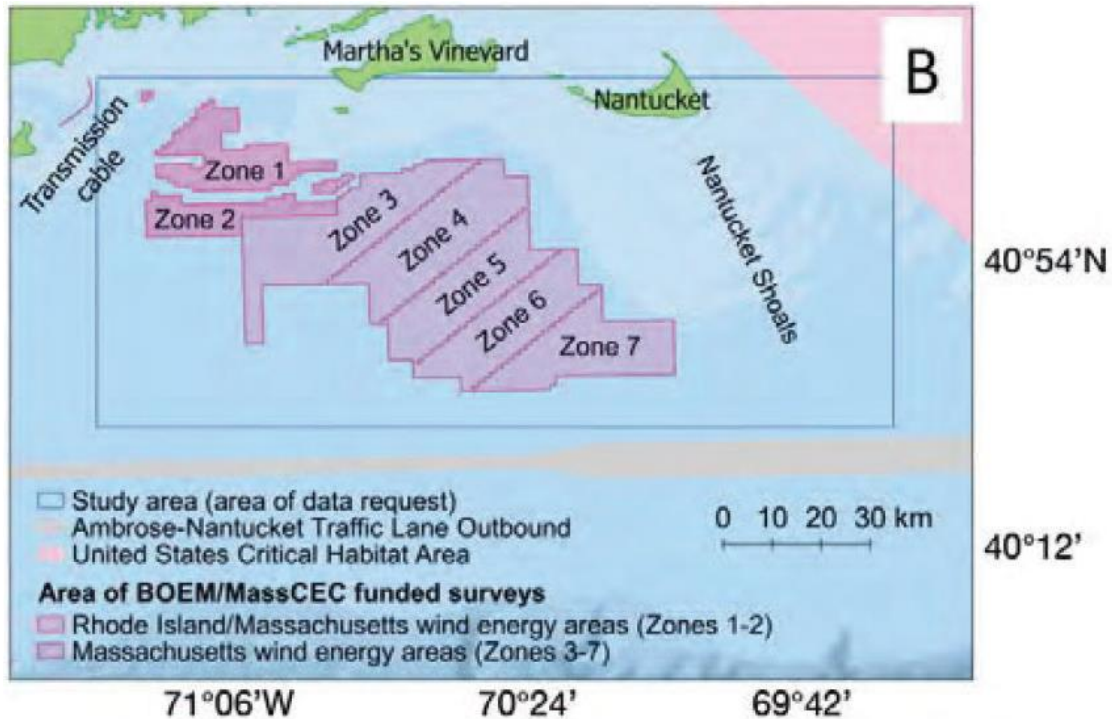
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<sup>10</sup> See District Court document, ECF No. 89, p. 24.

The BiOp's lack of engagement with Stober amounts to a dereliction in the agencies' duty to assess the best scientific evidence available in the ESA jeopardy analysis.

#### **4. ADDITIVE RISKS**

Appellees, in their discussion of the QR study, posit the spurious assertion that the QR study does not actually analyze the effects of the Vineyard project, as the RI/MA wind energy area is only proximate to the project's leased area. Their interpretation is incorrect. The QR study area encompasses the Rhode Island-Massachusetts wind energy area and the Massachusetts wind energy area, zones 1-2 and 3-7 respectively on the below image derived from the QR study (APPX.000451).

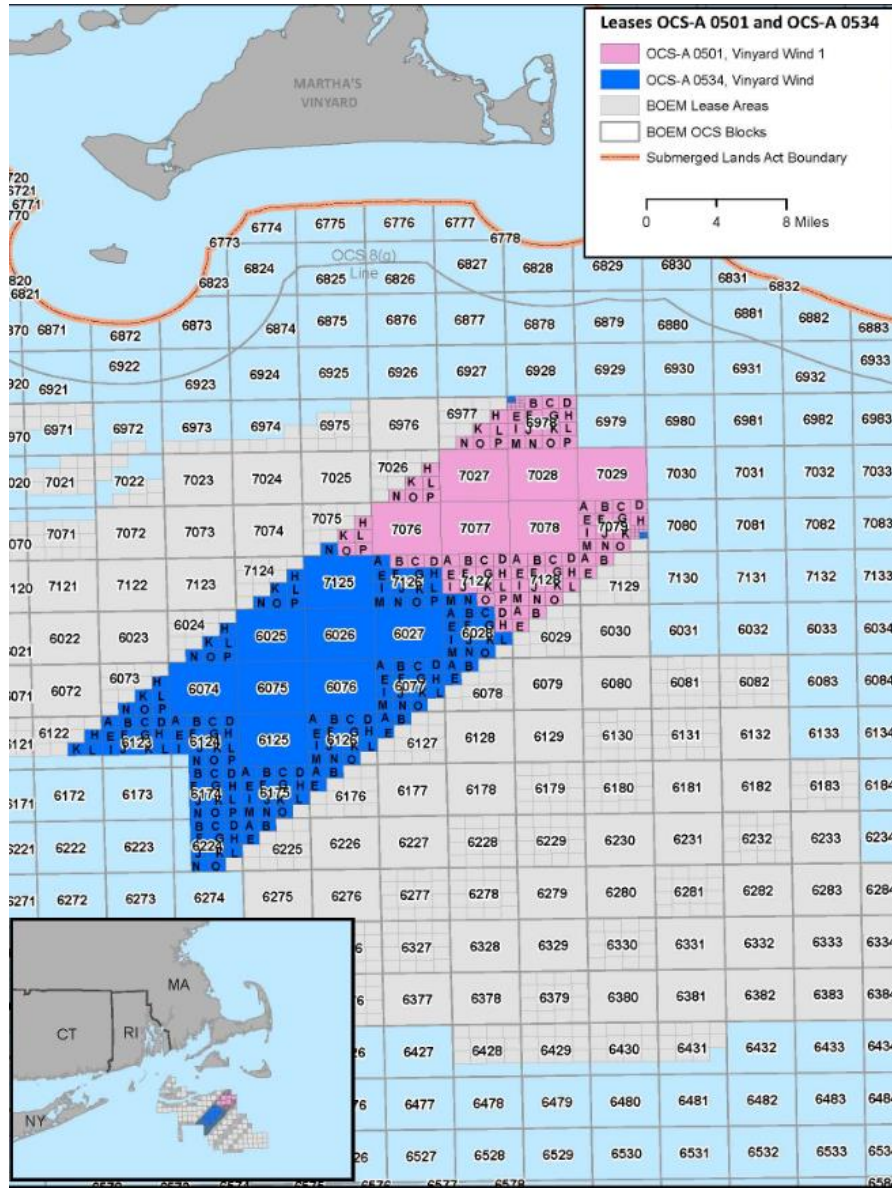


Therefore, Appellees do not correctly characterize this study, as it does in fact include the Vineyard project area. The text of the study confirms same:

“The study area included SNE waters from the shores of Martha’s Vineyard and Nantucket, including Nantucket Shoals, Massachusetts, USA, to approximately 90 km south, and encompass **all the lease sites for Massachusetts and Rhode Island wind energy development** [emphasis added].” APPX.000451.

The Vineyard Project is depicted in the following BOEM image, due south of Martha’s Vineyard.<sup>11</sup>

<sup>11</sup> <https://www.boem.gov/renewable-energy/state-activities/vineyard-wind-1>



Appellees note that one of the conclusions of the QR study is that mitigation measures employed by companies will be crucial, and indeed, Appellees continue to reiterate and cite to the agencies' putative suite of mitigation protocols. Fed. Def. Opp. Br. 45. However, these very measures which form the linchpin of the NMFS'

determination of zero Level A harassment takes (Fed. Def. Opp. Br. 27) are gravely flawed, as already discussed *supra*.

## **II. BOEM FAILED TO ADEQUATELY ASSESS, AND TAKE A HARD LOOK AT THE IMPACTS OF THE PROJECT ON RIGHT WHALES, IN CONTRAVENTION OF NEPA**

Because the FEIS analysis of the project's impacts on the NARW relies almost entirely on the flawed analysis in the BiOp, ACK RATs incorporates by reference its arguments delineated *supra*. While Appellees contend that BOEM considered the appropriate information and engaged in the statutorily stipulated "hard look" under NEPA, this is not the case for the following, additional, reasons.

First, the FEIS provides a legally insufficient description of baseline conditions in the context of the NARW and its habitat in and near the wind development area. "Without establishing the baseline conditions . . . there is simply no way to determine what effect the [project] will have on the environment and, consequently, no way to comply with NEPA." *Half Moon Bay Fishermen's Mktg. Ass'n v. Carlucci*, 857 F.2d 505, 510 (9th Cir. 1988). The FEIS **does not**:

- Discuss the importance of Area 537 in the context of the risks exacerbated and posed by the Vineyard Wind project;
- Disclose and discuss and fact that project wind development area overlaps with right whale hotspot zones;

- Discuss the planned vessel transit routes in the context of the project’s anticipated increase in vessel traffic (SA 1134, noting a vessel traffic increase of 4.7%, 1.6%, 4.0% for construction, operations and decommissioning respectively) and resultant implications for the NARW;
- Provide information/data on fishing activity in and near the project; and
- Provide significant data on NARW copepod abundance in the project area and waters circumventing the project

Second, contrary to Appellees contentions (Fed. Def. Opp. Br. 49), the FEIS does not adequately address entanglement concerns. Neither at SA 1384 nor elsewhere in the FEIS does BOEM analyze the entanglement risks augmented via Vineyard Wind’s strategy of compelling NARWs out of the project area pre-piling driving and into adjacent, heavily fished waters (waters heavily fished with lobster and crab, which use vertical buoy ropes). The FEIS does not assess whether NARWs entering the heavily fished waters will face an augmented risk of vertical buoy rope entanglement.

Third, Appellees are incorrect that the FEIS “thoroughly evaluates marine mammal hearing and the effects of noise, including pile driving and operational noise.” Fed. Def. Opp. Br. 49. Conversely, the FEIS, like the BiOp, erroneously concludes that pile-driving impacts on the NARW will be minor: “Based on the

analysis, BOEM considers impacts from pile driving to be minor for NARW due to avoidance of peak seasons of occurrence and the extensive mitigation and monitoring measures that are specific to the species.” SA 1129. As ACK RATs already explained, the predicate of the agencies’ low-impact conclusion is mitigation and avoidance measures which are ineffective, including very low efficacy PSOs, PAM, vessel speed restrictions inapplicable to crew transfer vessels, seasonality restrictions that ignore the high prevalence of NARW in the warm season, and soft-start mechanisms for which no evidence of efficacy exists.

And fourth, on operational noise, BOEM did not thoroughly examine the effects of noise on NARW; rather, it simply dismissed such impacts as negligible. SA 1129.

All said, BOEM, like NMFS, failed to adequately consider numerous important aspects of the analysis. BOEM’s NEPA analysis was not “sufficiently thorough” and thus contravenes NEPA. *Ctr. for Biological Diversity v. Bernhardt*, 982 F.3d 723, 734 (9th Cir. 2020) (quoting *Kern v. United States BLM*, 284 F.3d 1062, 1071 (9th Cir. 2002)).



### III. CONCLUSION

For the aforesaid reasons, the District Court's denial of Plaintiffs' Motion for Summary Judgment should be reversed, and Plaintiffs respectfully request the Court set aside the BiOp, FEIS, and Record of Decision for the Vineyard Wind project.

Date: December 6, 2023

Respectfully submitted,

/s/ Thomas Stavola Jr. Esq.

Thomas Stavola Jr. Esq.  
*Counsel for Appellants*

## CERTIFICATE OF COMPLIANCE

This document complies with the type-volume limitation of Federal Rule of Appellate Procedure 32(a)(7)(B)(ii) because, excluding the parts of the document exempted by Rule 32(f), it contains 5,685 words.

This document likewise complies with the typeface requirements of Rule 32(a)(5) and the type-style requirements of Rule 32(a)(6) because it has been prepared in a proportionally spaced face using Microsoft Office Word in 14-point Times New Roman font, case names are italicized, and serifs are used throughout.

Dated: December 6, 2023

/s/ Thomas Stavola Jr. Esq.  
Thomas Stavola Jr. Esq.

## CERTIFICATE OF SERVICE

I hereby certify that I electronically filed the foregoing with the Clerk of the Court for the United States Court of Appeals for the First Circuit by using the appellate CM/ECF system on December 6, 2023. I certify that all participants in the case are registered CM/ECF users, and that service will be accomplished by the appellate CM/ECF system.

/s/ Thomas Stavola Jr. Esq.  
Thomas Stavola Jr. Esq.