



September 8, 2023

Richard W. Spinrad, Ph.D.
NOAA Fisheries
1315 East-West Highway
Silver Spring, MD 20910

Dear Dr. Spinrad:

We are writing to alert your attention to urgent and credible information involving offshore sonar activity occurring within wind lease areas in the Atlantic. Specifically, our data show that the sonar is producing Level B harassment noise levels at distances that exceed those set by NOAA Fisheries (NMFS). Consequently, the protective distances adopted in NMFS-issued Incidental Harassment Authorizations (IHAs) for offshore wind sonar work are not protective at all. Rather, marine mammals are likely getting much closer to the sonar than should be allowed.

We believe this is a major factor behind the recent spate of whale deaths in the Atlantic Ocean since December 1, 2022 and the ongoing Unusual Mortality Events (UMEs) dating back to 2017-18. The only mitigation for noise is distance. The shortened Level B distances enforced under the IHAs have, in effect, rendered any expected mitigations useless.

What follows is a summary of our findings.

In May of this year, Robert Rand of Rand Acoustics, LLC, a leading acoustics expert, captured the high decibel sonar emitted by a survey vessel operating in BOEM lease #OCS-A 0538, approximately 43 nautical miles east of Barnegat Light, NJ. The frequency and sound power levels he measured did not match the equipment cited in the IHA. This finding prompted a comprehensive review of other expired and active IHAs which revealed a regular pattern of NMFS accepting Level B harassment distances that are well under those expected given the peak and RMS source sound pressure levels (SPL_{pk} and SPL_{rms}) for the sonar devices in use, specifically sub-bottom profilers or 'sparkers.'

Untested Sonar Sound Emissions

NMFS has insisted there is no information to support the claim that offshore wind sonar activities "[could directly lead to the death of a whale.](#)" However, NMFS should also be aware that

inadequate mitigations during a sonar survey could result in marine mammals experiencing sound levels that may injure or kill. The record suggests that NMFS has not conducted independent monitoring of the active sonar surveys in the field. On the contrary, it appears NMFS has made it a practice to accept and enforce assertions by IHA applicants regarding sparker SPLpk and SPLrms levels without validation of actual levels. NMFS has repeatedly claimed to the public that sufficient protective mitigations are in place when, in fact, the mitigations against Level B harassment (and potentially Level A impacts) imposed on applicants are not meaningful.

A Pattern of Using Inaccurate SPLpk and SPLrms

NMFS has made clear to IHA applicants that data provided by Crocker and Fratantonio (Crocker 2016) represent the best available information on source levels and that applicants should use Crocker 2016 when determining Level B threshold distances. If the SPLpk and SPLrms levels for a specific sparker device are not directly available in Crocker 2016, NMFS recommends source levels from the manufacturer be used. NMFS has allowed for a proxy from Crocker 2016 to be used “in instances where source levels provided by the manufacturer are unavailable or unreliable” (Ex: [88 FR 47846, July 25, 2023](#)) but at no time explains what it means for a manufacturer’s data to be unreliable.

In fact, SPLpk levels for the various configurations of sparker devices are readily available from the respective manufacturers and their levels are consistent with Crocker 2016. In instances where SPLpk levels are available but the SPLrms is absent, NMFS’s 2020 *Interim Recommendation for Sound Source Level and Propagation Analysis for High Resolution Geophysical Sources* ([NMFS 2020](#)) provides guidance on computing SPLrms levels. We see no reasonable path under NMFS’ recommendations to rely on proxy devices.

Yet, when we reviewed the currently active IHAs for site characterization work in wind lease areas, we found that *all* the IHAs used a Crocker 2016 proxy and in *all* cases the SPLpk and SPLrms levels were well below typical peak and RMS levels for the device. For example, the manufacturer specification for the Geo-Marine Geo-Source 400 tip, 800 joule sparker shows an SPLpk of 226 dB with an estimated SPLrms of 219 dB using NMFS’s 2020 Interim recommendation. A 219 dB,rms under NMFS ’s model for transmission loss results in a Level B threshold distance of 890 meters. *Nonetheless, all the IHA applicants selected a Crocker 2016 proxy with an SPLrms of 203 and modeled Level B distance of just 141 meters.*

One egregious example of this involves an IHA issued to Equinor Wind LLC ([85 FR 60424, September 20, 2020](#)) for activity in the #OCS-A 0520 and OCS-A 0512 lease areas. NMFS concurred with the applicant’s use of a Crocker 2016 proxy with lower SPLpk and SPLrms levels despite [Equinor’s IHA application](#) clearly articulating the manufacturer numbers of 220 dB,pk and 216

dB,rms. Equinor even cites NMFS 's rule for determining source levels in the application (page 12) but at no point justifies its selection of a proxy over the manufacturer's data other than to state the "sound source levels were previously approved by NMFS." A 216 dB,rms would result in a Level B harassment distance of 631 meters under NMFS 's model versus the lower 141 meters that NMFS accepted.

Inadequate Mitigations

All mitigations relating to sonar sound levels within the IHA are predicated on Level B threshold distances. Protected Species Observers (PSO) watch for instances of take for most marine mammals at the 141-meter mark. For the North Atlantic right whale and other ESA-listed whales, the distance is set at 500 meters, which still falls short of NMFS 's model for Level B distance when the proper SPLrms is applied. Additionally, the estimated instances of take authorized in the IHAs are calculated based on a total ensonified area where the area is a function of the Level B distance. Using a Level B distance that is a fraction of the more appropriate distance, causes the number of approved takes per IHA to be woefully understated.

We note that U.S. Coast Guard data show roughly 15 separate sonar vessels are currently active within the New York and New Jersey wind lease areas and each vessel may be producing sound levels that far exceed NMFS 's threshold standards for protecting marine life.

Changing Recommendations Without Notice

Finally, Rand Acoustics found that vessel-only continuous noise measured at 0.5 nautical mile was 126.5 dB,rms unweighted which exceeds NMFS 's Level B harassment threshold for continuous noise. Dynamic positioning thrusters (DP thruster) appear to be a significant, even primary contributor to overall vessel noise. At 126.5 dB,rms, Rand found that to meet NMFS's 120 dB,rms harassment limit for continuous noise it would require approximately 1 nautical mile.

Despite vessel noise levels exceeding NMFS 's 120 dB,rms threshold, NMFS justified dismissing the need to regulate vessel noise this way ([83 FR 7655, February 22, 2018](#)):

- a) "sound produced through use of DP thrusters is similar to that produced by transiting vessels and DP thrusters are typically operated in a similarly predictable manner;"
- b) NMFS "does not *believe* (emphasis added) acoustic impacts from DP thrusters are likely to result in take of marine mammals in the absence of activity ...or associated activities that may increase the potential to result in take when in concert with DP thrusters";

c) "Monitoring of past projects that entailed use of DP thrusters has shown a lack of observed marine mammal responses as a result of exposure to sound from DP thrusters."

NMFS provides no explanation for how DP thrusters produce sound levels similar to transiting vessels, particularly in open ocean areas nor could we find documentation of "past projects" and the methodologies followed to assess the effect of DP thruster noise on marine life. Since the acoustic impacts of the vessel noise with DB thrusters are occurring in association with activities that "may increase the potential to result in take" there is no basis for NMFS believing the continuous noise from the sonar operation should not be mitigated. Rather, it appears NMFS arbitrarily, and without public notice, eliminated the need to enforce its Level B threshold for continuous noise during offshore wind energy sonar activities. In doing so, it appears NMFS relinquished its enforcement authorities granted under the MMPA and permitted a noise source that could harm or kill marine life to proceed without limits.

We are concerned that NMFS's established recommendations for determining Level B harassment distances have been eroded and weakly enforced. Our findings suggest NMFS personnel either do not understand the parameters for sonar operation or that NMFS has been complicit in a deliberate act to weaken marine life protections for the benefit of an applicant. Regardless, the situation is untenable. Had NMFS followed its own recommendations for determining Level B harassment distances, and had NMFS investigated actual sound levels propagating from sparker devices we might not be seeing so many whales dying. NMFS 's approval of shortened Level B harassment distances has placed marine life, including the critically-endangered North Atlantic right whale, at a high risk of encountering loud sonar noise levels.

These facts suggest that there has been a complete breakdown in the system designed to protect marine wildlife and protect the North Atlantic right whale from extinction. We request emergency action by NMFS and BOEM to address this matter beginning with the immediate revocation of IHAs now active. If you have any questions or would like to read the Rand Acoustics report, please contact me by email at lisa@saverightwhales.org or by phone at 603.838.6588.

Sincerely,

A handwritten signature in black ink, appearing to read 'Lisa Linowes', with a stylized flourish at the end.

Lisa Linowes,

For The Save Right Whales Coalition

cc:

President Joe Biden

Michael S. Regan, Administrator, EPA

David Cash, Regional Administrator, Region 1, EPA

Lisa F. Garcia, Regional Administrator, Region 2, EPA

Radhika Fox, Assistant Administrator, Office of Water, EPA

Brian Frazer, Director, Assistant Administrator, Office of Wetlands, Oceans and Watersheds, EPA

Deb Haaland, Secretary, Department of the Interior

Liz Klein, Director, BOEM

Walter Cruickshank, Deputy Director, BOEM

William Yancey Brown, Environmental Program Chief, BOEM

Karen J. Baker, Chief of Renewable Energy, BOEM

Jaimey Bavishi, Asst Sec. of Commerce for Oceans and Atmosphere/Deputy NOAA Admin, NOAA

Michael C. Morgan, Asst Sec. of Commerce for Environmental Observation and Prediction, NOAA

Nicole LeBoeuf, Assistant Administrator, National Ocean Service, NOAA

Steven Thur, Assistant Administrator, Oceanic and Atmospheric Research, NOAA

Janet Colt, Assistant Administrator, National Marine Fisheries Service, NOAA

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Frances M.D. Gulland, Commission Chair, Marine Mammal Commission

Sue E. Moore, Commissioner, Marine Mammal Commission

Andy J. Read, Commissioner, Marine Mammal Commission

Peter Thomas, Executive Director, Marine Mammal Commission

Manish Bapna, President and CEO, NRDC

Ben Jealous, Executive Director, Sierra Club

Holly Bender, Chief Energy Officer, Sierra Club

Fred Krupp, President, Environmental Defense Fund

Amanda Leland, Executive Director, Environmental Defense Fund

Mark Brownstein, Senior Vice President, Energy Transition, Environmental Defense Fund

Andrew Sharpless, CEO, Oceana

Jim Simon, President, Oceana

Save Right Whales Coalition

<https://saverightwhales.org/>