

SUBMISSION TO NATIONAL MARINE FISHERIES SERVICE OFFSHORE WIND, permitting and incidental takes, federal register 2023/03/30/2023-06594

Permits and Conservation Division
Office of Protected Resources
National Marine Fisheries Service

Jolie Harrison, Chief, Permits and Conservation Division, Office of Protected Resources, National Marine Fisheries Service.

Email to <u>ITP.Potlock@noaa.gov</u>.

Good Morning, Chief Harrison,

https://www.federalregister.gov/documents/2023/03/30/2023-06594/takes-of-marine-mammals-incidental-to-specified-activities-taking-marine-mammals-incidental-to

The North American Platform Against Wind Power (NA-PAW) represents over 2 million citizens in the USA and Canada, mostly USA, and over 370 individual groups. We liaise with Europe and benefit from access to events and policies related to energy and harm to wildlife, ongoing.

We write with alarm and concern regarding the ongoing permitting, incidental, to specified activities, "taking" marine mammals, with respect to sonar and seismic testing for proposed industrial wind projects. The harm is being noted internationally.

It is to us, astonishing that the vast 1.500 MW offshore wind project itself has not yet undergone the planning process, let alone been given approval. Premature permitting, or re permitting, seems very odd and precipitous.

To quote Suzanne Albright of Great Lakes Wind Truth: "To ignore the recent deaths of cetaceans which have demonstrated the clear and present danger, will attract justified accusations of willful blindness - as will any wrongful renewal of a prior permit which will undoubtedly result in further deaths and casualties. There is clearly no



oversight, no analysis, even in light of recent deaths/beaching, and other related abnormal numbers of deaths."

David T. Stevenson of the Caesar Rodney Institute, (email communication) informs us of the passage of <u>"The Lower Energy Cost Act"</u>, which was approved in a 244-189 vote.

The amendment would require the Government Accountability Office to investigate the environmental review processes for offshore wind projects."

These would include examination of impacts on, including reporting to Congress:

- Whales, finfish, and marine mammals,
- Commercial and recreational fishing,
- Recreation and tourism,
- Invertebrates,
- Essential fish habitat,
- Benthic resources,
- Cultural, historical, and archaeological resources,
- Sustainability of shoreline beaches and inlets,
- Military use and navigation/vessel traffic
- And the impacts of hurricanes and other severe weather on offshore wind projects.

According to Mr. Stevenson, these are the very issues BOEM has highlighted, but the permitting continues. *We welcome fast application of these investigative reviews.*

Here is a link to a story on the

aamendment: https://www.washingtonexaminer.com/policy/energy-environment/offshore-wind-buildout-faces-bipartisan-threat-over-whale-deaths

Federal regulators admitted offshore wind cables are injuring certain fish species. See this link https://climate-science.press/2023/03/27/federal-regulator-concedes-offshore-wind-could-pose-threat-to-marine-life/

<u>See also our link to dangerous cabling and infrastructure misdemeanors:</u> these were outlined in a suit prepared by Simon Kinsella concerning egregious dangers via South Fork Wind.

Quote from our article at Master Resource as linked above.



A quick description of equipment and access to manufacturing, transportation, and installation prep is here. This industry article describes an average European project of 80 to 150 steel foundations, each weighing about 1,000 tons, to be stored and moved in two parts, as well as the hundreds of miles of power cables. "It is not uncommon to see hundreds of turbine blades that are over 250 feet long being stored at offshore wind farm port facilities ready to be loaded out for a single project," in Europe.

Add cranes, jack up vessels, preparation for decommissioning, demolition, disposal of redundant materials, careful containment, or removal of hazardous materials. Add preparation for dredging for cable laying. Add permits from the US Army Corps of Engineers (dredging, construction); add permits from the Maritime Administration (Secretary of Transportation), for non deep ports.

Add an extremely serious concern for the staging area for South Fork Wind: a legacy of contaminated sediment from many historical uses. Chosen sites are often urban communities, ports, and provide access to grids and consumers. Due to proximity to urban communities... "Thus, contaminated sediments will be found at a majority of port facilities proposed for redevelopment."

See the link again, for Si Kinsella's 17 complaints, which include bid rigging, improper control of ground water and water safety, deception to the public about the cost of the project and supposed energy. It appears again, a map of incredible shoddiness, lack of environmental care and caution. It is important not to continue along the Eastern Seaboard with these networks of, I would say, shameful haste and environmental harm.

We mention these features of this suit because any permitting to "take" incidentally of wildlife is hideous enough: industrial wind is not meaningful, is not green, and harms in many collateral ways. There should be zero permitting of any kind, until all of these features of harm or potential harm, now realized in many parts of the world, are studied, ethically examined for remediation, and with a bead line for cost/ benefits. (It is our view that the conclusion will be easily reached.)

Briefly, the world's experience with offshore wind, is less than rosy. Alarming costs, uncountable harm to wildlife. The relation to whale and dolphin deaths can be argued ad nauseum in the GOOGLE searches, but it is very obvious even to children, that there is a direct link to sonar/seismic testing for the promotion of industrial wind. Calls for a moratorium are well placed, reasonable.

Even Japanese media reports the harm.

https://www.japantimes.co.jp/news/2023/02/19/business/offshore-wind-whale-problem/#:~:text=Whale%20deaths%20are%20only%20the,public%20opposition%20scuttling%20its%20plans.



COSTS

Delays are costly. The cost to consumers is unreasonable and, in our view, immoral.

"Developers spent a record \$4.4 billion last year just for the rights to install turbines off the coast of New York and New Jersey, in a blockbuster auction that underscored the surging enthusiasm for renewable energy. Building the actual wind farms will take much more investment, with a \$10 billion price tag for some of the biggest projects. By 2030, total capital expenditures to achieve the country's offshore wind targets could total some \$100 billion, according to one estimate that has been cited by the US Department of Energy."

The rush to renewables is being dampened by high costs of cables, infrastructure as noted above that is roughshod, and dangerous, precipitous to water quality control (Avangrid and utilities are <u>currently digging at its lease area, off Massachusetts).</u>

We hope you will understand our analysis: It is an entire chaotic mess of permitting, attempts to monitor, assess, inadequate, and little regard for what we know. We KNOW of the harm, and its apparent escalation.

Permit first, study later. Not a great idea. It would behoove us all to immediately halt any permitting and construction of any kind related to offshore wind, until the realities of the "Lower Energy Cost Act" (Government Accountability Office) takes root. Below from Rep Chris Smith's press release.

"The offshore wind industrialization approval process has left unaddressed and unanswered numerous serious questions concerning the potentially harmful environmental impact on marine life and the ecosystems that currently allow all sea creatures great and small to thrive," Smith said during House debate on his amendment, noting at least 15 dead whales have washed ashore in New Jersey and New York since December.

"Like canaries in coal mines, the recent spate of tragic whale and dolphin deaths and a well-founded suspicion that geophysical surveys including the use of sonar may be a contributing cause, has brought new light and increased scrutiny to the fast tracking of approximately 3,400 offshore wind turbines covering 2.4 million acres by 2030—all



embedded into the ocean floor by pile drivers—or floated—in the North Atlantic Planning Area that includes New Jersey's coast," said Smith.

Specifically, Smith's amendment would require the US Government Accountability Office (GAO)—the congressional watchdog—to investigate and report to Congress on the offshore wind projects' impacts on whales and other marine life, commercial and recreational fishing, tourism, and military use and navigation/vessel traffic, as well as the impacts of hurricanes and other severe weather on offshore wind projects. (Our emphasis)

AN IMPORTANT ASSESSMENT FOR OFFSHORE

https://www.sciencedirect.com/science/article/pii/S0048969722008956

Unravelling the ecological impacts of large-scale offshore wind farms in the Mediterranean Sea

Josep Lloret ^a, Antonio Turiel ^b, Jordi Solé ^c, Elisa Berdalet ^b, Ana Sabatés ^b, Alberto Olivares ^d, Josep-Maria Gili ^b, Josep Vila-Subirós ^e, Rafael Sardá ^d

The assessment of the Mediterranean Sea beset with offshore wind factories, features admonitions of a serious nature.

Highlights

- Offshore wind farms (OWF) pose serious environmental risks to the Mediterranean Sea.
- OWF models cannot be simply imported from the northern European seas to other seas.
- OWF should be excluded from areas of high biodiversity and/or high valuable seascape.
- OWF development should be forbidden in or in the vicinity of Marine Protected Areas (MPAs).
- Biodiversity loss and climate change are interconnected and must be tackled simultaneously.



(**NOTE:** Although we challenge the conventional theories, but imminently dying theories, of imagined world collapse due to "weather," we agree that biodiversity loss can and should be assessed regularly, halted to the largest degree possible.) We think you can easily see our reference to this important conclusion set is applicable.

According to many, the migration corridors of the Atlantic Right Whales are complex and endangered. WWF has mapped 845 superhighway routes of huge importance. One of these most certainly is the US Eastern Seaboard. This encompasses "30 years of satellite tracking data gathered by more than 50 research groups worldwide. Blue corridors are migration superhighways that allow whales to move between critical habitat essential for their survival — areas where they feed, mate, give birth, nurse young and socialize."

Travelling five times faster in water than air, sound is the most effective means for marine life to communicate across the ocean's vast expanse. But their musical notes are slowly sinking below a thickening layer of human-caused noise.

With the increasing industrialization of the ocean over the past several decades — port expansions, shipping intensification, oil and gas exploration and development — human caused noise is starting to overwhelm the natural ocean soundscape. And the impacts are now being documented across marine ecosystems, from whales down to plankton.

Underwater noise pollution has been linked to disrupting normal behaviors, masking communication, impairing feeding, and increasing stress levels; even causing permanent injury or death. Compounding existing stressors like overexploitation, chemical pollution and changing ocean conditions, in contributes to species decline and ecosystem degradation. Such losses are most immediately felt by Indigenous and other coastal communities who depend on marine resources for their wellbeing and livelihood.

We respectfully ask that all permitting and "take" permits be stopped, and those issued, rescinded. It is time for a complete halt on yet another example of profits, for net zero gain in energy, a tragic wildlife debacle, which is also a great financial cost to consumers. Frankly, industrial wind (and solar) are boondoggles, only bent on massive profits, tragic illegal wildlife deaths, massacre of biodiversity and habitat, and no reduction in CO2, which is not even a pollutant.

This is sadly, a mirror image of permitting wind developers on land, to take birds and bats, in certain quantities, and with general impunity. Endangered, be hanged. <u>You know, of course, the developers do the counting!</u>



Sincerely, and with thanks,

Sherri Lange CEO North American Platform Against Wind Power (NA-PAW) Great Lakes Wind Truth Save the Eagles International

ADDITIONAL RESOURCES

https://www.cnn.com/2019/09/12/us/whales-nearly-extinct-atlantic-ocean-scn-trnd/index.html#:~:text=Fisheries%20rely%20on%20the%20abundance,its%20largest%20and%20rarest%20whales.

Fisheries rely on the abundance of their crop, and when a link in the food chain disappears, the loss upsets the ecosystem's balance, disrupting population sizes and the presence of natural predators and prey.

"If they're gone, the Atlantic Ocean would lose one of its largest and rarest whales."

https://www.science.org/content/article/north-atlantic-right-whale-faces-extinction

https://www.theguardian.com/environment/2017/dec/10/north-atlantic-right-whales-extinct

(You do have to use the "extinction" word)

https://www.dailymail.co.uk/news/article-10745163/New-offshore-wind-farms-rushed-catastrophic-impact-Britains-sea-birds.html

New offshore <u>wind farms</u> are being rushed through with a 'catastrophic impact' on Britain's sea birds, experts warned yesterday.



https://jasonendfield.medium.com/thousands-of-gannets-will-perish-as-north-sea-wind-parks-expand-96ef63b1382

Thousands of gannets and gulls will be killed every year by wind turbines....

https://stopthesethings.com/2022/06/10/senseless-seagull-slaughter-offshore-wind-industry-wiping-out-britains-seabirds/

https://news.mongabay.com/2022/06/noise-pollution-spooks-whales-the-way-predators-would-study-finds/

Noise pollution spooks whales the way predators would, study finds

by Grace Hansen on 7 June 2022

- Whales appear to react to human-made noise in the ocean, such as naval sonar, in a similar way to which they respond to the sounds of their predators like killer whales, according to recent research.
- The authors of the study played the sounds of sonar and killer whales when whales from four species were present.
- The whales responded by breaking off their feeding forays, leading scientists to conclude that noise pollution in the ocean could leave them weaker and more vulnerable to predation.
- The researchers also suggest that marine mammals in the Arctic may be especially at risk as climate change alters their environment in ways that may make them more vulnerable.

Generally, the word pollution conjures images of billowing smokestacks, oily water and trashfilled highway medians. But for whales, dolphins and porpoises, a subtler and perhaps more sinister source of pollution also poisons their realm: human-made sound.

https://wattsupwiththat.com/2016/03/03/are-vibrations-from-offshore-wind-turbine-farms-killing-whales/

From Mark Duchamp, Spain

It relates to the beaching of many sperm whales in the offshore windfarm area of the North Sea in 2016.



Are vibrations from offshore wind turbine farms killing whales?

Environmentalists say navy sonar hurts whales, but ignore impacts of offshore wind farms



Dead whale on European beach. For more such images see wcfn.org

Paul Driessen and Mark Duchamp

Between January 9 and February 4 this year, 29 sperm whales got stranded and died on English, German and Dutch beaches. Environmentalists and the news media offered multiple explanations – except the most obvious and likely one: offshore wind farms.

Indeed, that area has the world's biggest concentration of offshore wind turbines, and there is ample evidence that their acoustic pollution can interfere with whale communication and navigation.

However, Britain's *Guardian* looked for answers everywhere but in the right place. That's not surprising, as it tends to support wind energy no matter the cost to people or the environment. After consulting with a marine environmental group, the paper concluded: "The North Sea acts as a trap.... It's virtually impossible for [whales] to find their way out through the narrow English Channel."

No it's not. These intelligent animals would naturally have found their way to and through the Channel by simply following the coast of England or continental Europe. But the author seems determined to pursue his "explanation," even when it becomes increasingly illogical. "The [trapped] whales become dehydrated because they obtain their water from squid," he argues, before acknowledging that "the dead Dutch and German animals were well-fed," and that the North Sea's squid population has increased in recent years.

The article discards Royal Navy sonar and explosives, because "big naval exercises in UK waters are unusual in midwinter." Finally, the author concludes with this quote from his purported expert: "When there's a mass stranding, it's always wise to look at possible human



effects. But, at the moment, I don't see anything pointing in that direction." He should look a bit harder. Not everyone is so blind.

Indeed, "researchers at the University of St. Andrews have found that the noise made by offshore wind farms can interfere with a whale's sonar, and can in tragic cases see them driven onto beaches where they often die," a UK *Daily Mail* article observed.

It is certainly possible that permanent damage to the cetaceans' middle and inner ears, and thus to their built-in sonar, can result from <u>large air guns</u> used during seismic surveys and from violent bursts of noise associated with pilings being rammed into the rock bed. Wind promoters themselves admit that their pile-driving can be heard up to 50 miles (80 kilometers) underwater, and can be harmful to whales that happen to be nearby. But unless these injuries cause external bleeding, they are very difficult to detect.

Natural phenomena such as seaquakes, underwater volcanic eruptions and meteorites crashing into the oceans have likely been the cause of whale beachings throughout history, by injuring the animals' inner ears and sonar organs, frightening and disorienting them, and causing them to seek refuge in shallow waters. In more recent years, "military exercises using mid-frequency sonar have been linked quite clearly to the disorientation and death of beaked whales," says *The Guardian*.

Low frequency sonar can be even more dangerous, the Natural Resource Defense Council asserts. "Some systems operate at more than 235 decibels," the NRDC has said, "producing sound waves that can travel across tens or even hundreds of miles of ocean. During testing off the California coast, noise from the Navy's main low-frequency sonar system was detected across the breadth of the northern Pacific Ocean."

The U.S. Navy itself has recognized the danger that sonar systems represent for marine mammals. As reported in <u>Science magazine</u>: "In a landmark study, the U.S. Navy has concluded that it killed at least six whales in an accident involving common ship-based sonar. The finding, announced late last month by the Navy and the U.S. National Marine Fisheries Service (NMFS), may complicate Navy plans to field a powerful new sonar system designed to detect enemy submarines at long distances," despite how important that system and its submarine and surface ship counterparts are for national security.

It has been said the "low-frequency active sonar" from this system would be the loudest sound ever put into the seas, <u>The Guardian states</u>. But wind turbines also emit low frequency noise, including dangerous infrasound. At sea, these vibrations are transmitted via the masts to the water, and via the pilings to the rock bed. They can travel up to 31 miles (50 kilometers).

Granted, the acoustic pollution caused by sonar – particularly powerful navy systems – is greater than that from wind turbines. But wind turbine noise and infrasound are nearly



constant, last as long as the turbines are in place and come from multiple directions, as in the areas where the whales were recently stranded.

On land, although the wind industry continues to deny any culpability, evidence is mounting that low frequency and particularly infrasound waves emitted by wind turbines have significant adverse effects on local residents, including sleep deprivation, headaches, tachycardia (abnormally rapid heart rates) and a dozen other ailments. Underwater, a milieu where sound waves travel much farther, it would be irresponsible and unscientific to argue that whales are not affected by operating wind turbines, all the more because cetaceans use their sonar to "see" what's around them

As scientists have <u>pointed out</u>, "It is likely that acoustic masking by anthropogenic sounds is having an increasingly prevalent impact on animals' access to acoustic information that is essential for communication and other important activities, such as navigation and prey/predator detection."

"Blinded" by this masking, whales and dolphins could seek refuge in shallow waters, away from big ships and killer whales. There, low tides could surprise them, as large pelagic species have limited experience with tidal flows.

In September 2012, 19 pilot whales, a minke whale and a large sei whale beached on the coast of Scotland opposite an area where air guns were being used by ships surveying the ocean floor, as a prelude to installing offshore wind farms. "A second pod of 24 pilot whales was spotted in shallow water by Cellardyke around the same time, but [it] returned to sea without beaching," the article noted.

Offshore turbines were also <u>associated with</u> "many" stillborn baby seals washing up onshore near the UK's Scroby Sands wind farm in June 2005. "It's hard not to conclude the wind farm is responsible," the author concluded.

Many more similar deaths may well have been caused by wind farms at sea. The scientific and environmental literature abounds in warnings about risks to marine mammals from man-made noise.

Modern 8-megawatt offshore turbines are 656 feet (200 meters) above the waves; their rotating blades sweep across a 538-foot (164-meter) diameter. Those enormous blades create powerful pulsating infrasound and <u>exact a toll</u> on many species of marine birds, and even on <u>bats that are attracted</u> to the turbines as far as 9 miles (14 km) offshore.

In a February 2005 letter, the Massachusetts Audubon Society estimated that the proposed Cape Cod wind project alone would kill up to 6,600 marine birds each year, including the roseate tern, which is on the endangered list.



Do we really want to add marine mammals to the slaughter of birds and bats, by expanding this intermittent, harmful, enormously expensive and heavily subsidized energy source in marine habitats?

In addition, having forests of these enormous turbines off our coasts will greatly increase the risk of collisions for surface vessels, especially in storms or dense fog, as well as for submarines. It will also impair radar and sonar detection of hostile ships and low-flying aircraft, including potential terrorists, and make coastal waters more dangerous for Coast Guard helicopters and other rescue operations.

The offshore wind industry makes no sense from an economic, environmental, defense or shipping perspective. To exempt these enormous installations from endangered species and other laws that are applied with a heavy hand to all other industries – and even to the U.S. and Royal Navy – is irresponsible, and even criminal.

Paul Driessen is senior policy analyst for the Committee For A Constructive Tomorrow (www.CFACT.org) and author of Eco-Imperialism: Green power – Black death. Mark Duchamp is president of Save the Eagles International.

https://heartland.org/opinion/threat-to-endangered-whales-gets-louder/ David Wojick, from an email communication

Meet Tethys. Not the real Tethys, the mythical Greek titaness of the sea, but DOE's center for reporting research on the environmental impact of energy technology on sea life, including whales. This is the science side of DOE (where I used to work), not the Ocean Energy development side.

Tethys has some profoundly disturbing things to say about offshore wind and really loud underwater noise. Noise that could easily adversely affect the North Atlantic Right Whales.

It is all about pile driving, or in this case tower driving. The hundreds of huge offshore wind towers proposed for Virginia do not have poured concrete foundations like onshore towers do. Instead they are literally driven into the solid seabed by floating pile drivers. The lower part of the tower is designed to be driven.

In fact these driven-in tower bottoms are called "monopiles". Here is what Tethys says about them:

"The environmental concerns associated with offshore wind farms vary with foundation type. Monopiles, for example, require pile-driving, which produces INCREDIBLY LOUD NOISES that tend to propagate far in the water, even after mitigation strategies such as bubble shields, slow start, and acoustic cladding are employed." (Emphasis added)

From "Fixed offshore wind" at https://tethys.pnnl.gov/technology/fixed-offshore-wind



Note that not only are the wind tower pile driving noises INCREDIBLY LOUD, the available mitigation technologies do not change that fact."