

UNITED STATES DISTRICT COURT
DISTRICT OF NEW JERSEY

PROTECT OUR COAST NJ; ACK FOR WHALES;
CLEAN OCEAN ACTION, INC.;
FISHERMAN'S DOCK COOPERATIVE;
SEAFREEZE SHORESIDE INC.;
BELFORD SEAFOOD COOPERATIVE;
MISS BELMAR, INC.; CAPTAIN ALAN SHINN;
AMERICAN SEAFOOD LLC;
CAPTAIN GARY STONE; OLD SQUAW FISHERIES, INC.;
HERITAGE FISHERIES, INC.; BKS FISHERIES, INC.;
CAPTAIN SHAWN MACHIE; LUND'S FISHERIES, INC.;
LONG ISLAND COMMERCIAL FISHING ASSOCIATION, INC.
HON. JOHN A. PETERSON, Jr., Mayor of Seaside Park, New Jersey,

Docket No: 25-cv-6890

Plaintiffs,

v.

THE UNITED STATES OF AMERICA;
DOUG BURGUM, in his Official
Capacity as Secretary of the Interior;
the BUREAU OF OCEAN ENERGY MANAGEMENT
of the Department of the Interior;
WALTER D. CRUICKSHANK, in his Official Capacity as
Acting Director of the Bureau of Ocean Energy
Management; EQUINOR ASA;
EQUINOR US; EMPIRE OFFSHORE WIND LLC;
EMPIRE WIND 2 LLC; EMPIRE LEASEHOLDER LLC
and THE KINGDOM OF NORWAY,

Defendants.

COMPLAINT

Plaintiffs by their attorney, Bruce I. Afran, as and for their Complaint against Defendants,
assert as follows:

PRELIMINARY STATEMENT

1. Construction on the Empire Wind offshore wind turbine projects off the coast of New York and New Jersey was stopped in April following the Presidential Memorandum dated January 20, 2025 (“the Memorandum”); annexed as Exhibit A. The Memorandum required that the Secretary of the Interior investigate all offshore wind projects to determine if they will cause ecological, environmental or economic harm. Pursuant to the Presidential order, a stop work order was issued on April 16, 2025 by the Secretary of the Interior, Defendant Doug Burgum, to Director of the Bureau of Ocean Energy Management (BOEM), defendant Walter D. Cruickshank. The order directed that all work stop on the Empire Wind project until the completion of the investigation ordered by the President. See Letter of Secretary Burgum, April 16, 2025, annexed as Exhibit B.

2. A mere four weeks later, in a extraordinary and unprecedented turnabout, on May 19, 2025, the Director of BOEM reversed this order and stated that work may resume on Empire Wind. See “Amendment to Director’s Order dated April 16, 2025”, annexed as Exhibit C (the “reinstatement order”).

3. The reinstatement order violated the Administrative Procedure Act (APA), 5 U.S.C. §§ 701-796 by failing to offer a factual basis for the reinstatement and is, therefore, arbitrary, capricious or unreasonable and fails to satisfy the requirements of the APA.

4. In the Presidential Memorandum, the President identified a need for further investigation and review, a conclusion that is supported by the record, as discussed in this Complaint. Multiple agencies such as the United States Coast Guard (USCG), the Department of Energy (DOE), the National Oceanic and Atmospheric Administration (NOAA) and the National

Marine Fisheries Service (NMFS) and BOEM itself, have identified significant ecological harm that will flow from the turbine construction and operation, harm that cannot be remediated and that will permanently injure the ecology and ecosystem of the waters known as the New York Bight. In each of these reports, the agencies acknowledge, as does the President, that further investigation is needed. Thus, the April 16, 2025 stop work order was properly grounded in an existing and extensive record and the May 19, 2025 reinstatement order was made in the face of that record and without any identification of a factual basis for restoring the work permits.

5. In the Record of Decision (ROD) and in its Final Environmental Impact Statement (FEIS) for the Empire Wind projects, BOEM has failed to adopt these recommendations, failed to offer remedial measures to address the cognate agencies' concerns and failed to refute the cognate agencies' concerns as to ecological and navigational harm.

6. Thus, the record shows a substantial basis for the President's concern that the offshore wind proposals have not been adequately investigated or reviewed, a record that fully supports the Secretary's April 16, 2025 stop work order. BOEM itself has acknowledged that these ecological and environmental harms cannot be resolved or remediated based on present scientific knowledge, giving further support to the Presidential Memorandum and the Secretary's order.

7. In its May 19, 2025 reinstatement of the work permits, BOEM failed to adhere to the requirements of the Administrative Procedure Act in that it failed to offer a factual and substantiated basis to support the reinstatement order. In fact, the reinstatement order is silent on any basis for the administrative restoration of work permits. The May 19, 2025 order *is a single sentence* with no substance of *any* kind, let alone any that supports the resumption of work on

Empire Wind. No explanation was offered to explain the basis for the reinstatement of the work permit; no results of any investigation were announced; and no factual basis was identified in the May 19, 2025 order to support this administrative reversal.

8. As such, this Complaint asserts that the reinstatement order violates the APA and is arbitrary, capricious, unreasonable or is unsupported by the record and that the stop work order must be restored.

9. Fishing industry participants, trade groups and environmental groups have joined in this Complaint to seek an order declaring 1) that BOEM acted illegally in reinstating the Empire Wind work permits and 2) an injunction vacating the reinstatement order and restoring the April 16, 2025 stop work order.

10. In addition, plaintiffs seek an order vacating Equinor's lease on the ground that it is not legally entitled to an award of a lease on the Outer Continental Shelf because Equinor is the controlled agency or instrumentality of a foreign government, namely the Kingdom of Norway and is, therefore, ineligible to receive a lease under the Outer Continental Shelf Act (OCSLA), 43 U.S.C. § 1331, et seq.

JURISDICTION AND VENUE

11. Jurisdiction is premised on 28 U.S.C. 1331 based on a federal question arising under the Administrative Procedure Act (APA), 5 U.S.C. § 701-706 and OCSLA, 43 U.S.C. § 1331, et seq.

12. This court has subject matter jurisdiction pursuant to 5 U.S. C. §§ 701-706 (APA judicial review provisions); 28 U.S.C. § 2201 (Declaratory Judgment Act; and 28 U.S.C. § 2202 (injunctive relief) and OCSLA.

13. Venue lies in the District of New Jersey based on the place of business of plaintiffs being in this District and that the effects and injuries caused by the proposed Empire Wind project will be incurred by plaintiffs resident in this District, as described in this Complaint.

14. For reasons set forth herein, an actual justiciable controversy exists between the parties within the meaning of 28 U.S.C. § 2201.

PARTIES

15. Plaintiff PROTECT OUR COAST NJ (“POCNJ”) is a 501(c)(3) tax exempt corporation based in Ocean City, New Jersey consisting of residents, homeowners, business owners, fishermen and visitors of New Jersey’s coastal communities with the goal of working to stop the development of offshore wind energy off the coast of New Jersey. POCNJ seeks comprehensive research evaluating the effects of offshore wind turbine structures on the environment, economy, tourism, fisheries, wildlife and coastal communities of New Jersey. Its members consist of New Jersey coastal residents, business owners and environmentalists who advocate against the installation of offshore wind turbines off the New Jersey coast.

16. Plaintiff ACK FOR WHALES is a 501(c)(3) tax exempt corporation based on Nantucket that exists to provide public outreach and education for the purpose of protecting the coastal ocean environment and defending cetacean species, particularly, the heavily endangered North Atlantic right whale that uses the NY Bight and the Empire Wind Lease Area for food and migration as it enters the Massachusetts and Rhode Island waters surrounding Nantucket; injuries to the North Atlantic Right Whale’s food supply, habitat and safety caused by space use conflicts between cetaceans and WTG structures and vessels, loss or interference with planktonic food

sources, risk to cetacean navigation as species migrate through the Bight and other sources of harm expected to be caused by the WTG structures will cause death or illness to these creatures; such will impact adversely the ability of cetacean species to travel and migrate to the waters off Nantucket, the ecology and ecosystem that is a part of Ack For Whales's unique mission. In the case of the North Atlantic Right Whale even one loss of the approximate 340 individuals left in the species has a species survival impact that will injure the mission and purpose of Ack For Whales.

17. Plaintiff CLEAN OCEAN ACTION ("COA") is a 501(c)(3) corporation based in Long Branch, New Jersey that is organized to protect and advocate for the health and ecology of the New York Bight and its ecosystem. COA was founded in 1984 and is dedicated to improving the ecosystem and water quality of the New York /New Jersey Bight, a section of the Atlantic Ocean off the New Jersey and New York coast. COA works as an issue-based coalition of up to 100 diverse groups, addressing marine pollution and industrialization through research, education, and advocacy to promote environmentally and economically sustainable solutions.

18. Plaintiff FISHERMEN'S DOCK COOPERATIVE (the "Cooperative") has been engaged in the fishing industry for more than 70 years. It has been created by its members to form a stable market for their catch and consists of 11 member-owners operating ten (10) active commercial trawler vessels that fish in the New York Bight ("NY Bight"), a body of water that is fronted by the coast of Long Island and the coast of New Jersey. The Cooperative accepts offloads of fish at its Point Pleasant Beach facility in New Jersey that is then processed and shipped overnight to New York City's fish markets and restaurants. Its member-owners and its other customers fish in the NY Bight and, among other areas, in Lease Area OCS-A- 0512 in the NY Bight, the location that will hold the Empire Wind 1 and 2 offshore wind projects.

19. Plaintiff MISS BELMAR, INC. is a corporation situated in Belmar, New Jersey that is primarily engaged in the full-time business of operating whale watching tours and is active in this business in the NY Bight and in Lease Area OCS-A-0512; in that vicinity multiple species of whales including the North Atlantic Right Whale, fin whales, sei whales, humpback whales and other species congregate and engage in a substantial part of their life histories; this area of the NY Bight is known for its whale activity, such activity has become more pronounced in recent years and is a core part of Miss Belmar's business. Due to the expected adverse impact on whale populations, their migration patterns, their food supplies and their health, Miss Belmar's business will be impacted and affected by construction and operation of the Empire Wind WTG structures and related facilities that will interfere and prevent navigation and will interfere with the presence of whale species. Miss Belmar also operates fishing trips in the NY Bight as a part of its business activities and will suffer the impacts on commercial fish stocks and limits on navigation caused by the WTGs, and, in fact, the area will be closed to commercial fishing due to navigational impediments, as described in this Complaint.

20. Plaintiff CAPTAIN ALAN SHINN is the owner/operator of Miss Belmar, Inc. and is the master and equity owner of Vessel Miss Belmar whose home port is Neptune, New Jersey and that is referred to above. Captain Shinn is injured because construction and operation of WTGs in Lease OCS-A-0512 will result in the cessation of commercial fishing activities in the Empire Wind lease area and will adversely impact the whale watching industry in the Lease Area and in the vicinity of the NY Bight.

21. Plaintiff AMERICAN SEAFOOD LLC operates commercial privately-owned fishing ports in Stonington and New London, Connecticut where they are in the business of offloading

commercial fishing vessels that also include other plaintiffs in this action. It is owned by Vincenzo Suppa and Giuseppe Suppa. American Seafood resells commercial catch on a wholesale basis. American Seafood also sells supplies including ice and fuel. American Seafood is injured because construction and operation of WTGs in Lease OCS-A-0512 will result in the cessation of commercial fishing activities in the Empire Wind lease area and will adversely impact American Seafood's business in the Lease Area and in the vicinity of the NY Bight.

22. Plaintiff CAPTAIN GARY STONE is the owner/operator of the vessel F/V MACKENZIE PAIGE, LLC. Captain Stone has fished the NY Bight and the Empire Wind Lease Area for 35 years for fluke, squid, whiting, scup, flounder and lands these species in New Jersey, New York, Connecticut, Rhode Island and Virginia under permits. Captain Stone is injured because construction and operation of WTGs in Lease OCS-A-0512 will result in the cessation of commercial fishing activities in the Empire Wind lease area.

23. Plaintiff SEAFREEZE SHORESIDE INC. ("Seafreeze") is a Rhode Island corporation that has an offloading and processing facility in Narraganset that is engaged in the business of offloading catch that is obtained from vessels fishing in the NY Bight and in Lease Area OCS-A-0512, among other areas; Seafreeze is engaged on a regular basis in offloading catch from the fleet operated by Seafreeze Fleet in the Western Atlantic including the NY Bight and Lease Area OCS-A-0512. Like others, Seafreeze will be impacted in its activities due to the presence in the NY Bight and the lease area of WTG structures and facilities as a result of the adverse impact on fish populations, prey sources, food supply and the entry of invasive species and the replacement of existing native stock projected to be caused by the WTG projects, as well as the navigational difficulties and hazard that will inhibit takings in the NY Bight, particularly in

the vicinity of the lease area. All of these activities that will affect and impact its customers will affect and impact Seafreeze. Seafreeze is injured because construction and operation of WTGs in Lease OCS-A-0512 will result in the cessation of commercial fishing activities in the Empire Wind lease area.

24. Plaintiff BELFORD SEAFOOD CO-OP is one of New Jersey's oldest fishing packhouses, established in 1953, it is located on the New Jersey Coastal Heritage Trail Route, under the jurisdiction of the National Park Service. The Co-op has 11 active members who operate eight commercial fishing vessels. The members offload their catch from their own boats as well as receive fish from out-of-state boats with New Jersey fisheries permits for shipping to the Hunts Point Seafood Market in the Bronx. Additionally, the Co-op sells ice and fuel to incoming out-of-state vessels and seafood directly from their port seafood shop. Their income is derived directly from the fish landed at their dock and the fuel and ice they sell, and would be harmed greatly by the construction of WTGs and their operation under Lease OCS-A-0512 in that construction of the WTGs will result in the cessation of commercial fishing activities in the Empire Wind lease area, on which the Belford Co-op depends on for a substantial portion of their revenues.

25. Plaintiff OLD SQUAW FISHERIES, INC. ("Old Squaw") is a commercial fishing company based in Montauk, New York, whose President is David Aripotch. Old Squaw owns a fishing boat called "FV Caitlin & Mairead," which is captained by David Aripotch. FV Caitlin & Mairead fishes the waters of the Empire Wind lease area. Old Squaw fishes for summer flounder, squid, whiting, and scup and lands these species at Old Squaw's home port in New York, at multiple ports in New Jersey, and in Virginia and North Carolina under permits. Old Squaw is

injured because construction of WTGs and their operation under Lease OCS-A-0512 will result in the cessation of commercial fishing activities in the Empire Wind lease area, on which Old Squaw depends for a substantial portion of its revenues in multiple states.

26. Plaintiff HERITAGE FISHERIES, INC. (“Heritage Fisheries”) is a commercial fishing company whose President is Thomas E. Williams, Sr., a commercial fisherman who started fishing commercially in 1967. Heritage Fisheries owns a fishing boat called “FV Heritage” that fishes the waters of the Empire Wind lease area. FV Heritage is captained by Thomas E. Williams Sr.’s son, Thomas Williams. The continuing economic viability of Heritage Fisheries depends, in part, on its ability to continue to fish in the Empire Wind lease area. Heritage Fisheries is injured because construction and operation of WTGs in Lease OCS-A-0512 will result in the cessation of commercial fishing activities in the Empire Wind lease area.

27. Plaintiff BKS FISHERIES, INC. (FISHERIES) is based in New Bedford, Massachusetts and is the owner and operator of F/V Capt. John, home port New Bedford. BKS Fisheries is co-owned by Plaintiff SHAWN MACHIE who fishes in the Empire Wind Lease Area for scallops, squid, monk, summer flounder (fluke), scup and Black Sea Bass. BKS, Machie and F/V Capt. John have New Jersey permits and land catch at plaintiff Fishermen’s Dock Cooperative and has sold fish to Plaintiff Lund’s Fisheries in Cape May, and to Virginia and North Carolina pack-houses with permits/endorsements for summer flounder and black sea bass caught in the Empire Wind lease area. BKS also processes and distribute fresh fish at its New Bedford location. Using other vessels, as well, Machie has fished the Empire Wind Lease Area since 1992. BKS Fisheries injured because construction and operation of WTGs in Lease OCS-

A-0512 will result in the cessation of commercial fishing activities in the Empire Wind lease area.

28. Plaintiff LONG ISLAND COMMERCIAL FISHING ASSOCIATION, INC. (“LICFA”) is a 501(c)(3) tax exempt commercial fishing industry group representing New York’s commercial fishermen and its fishing industry in 11 gear groups in 14 ports on Long Island. LICFA represents owners and operators from over 150 fishing businesses, boats, and fishermen who are home-ported on Long Island, some of which fish in state and federal waters that include the Empire Wind Lease area. LICFA and its members support extensive cooperative scientific research aimed at improving understanding of the marine environment an engaging in fisheries management, public education, and outreach. LICFA members are injured because construction of WTGs and their operation under Lease OCS-A-0512 will result in the cessation of commercial fishing activities in the Empire Wind lease area, on which some LICFA members depend for a substantial portion of their revenues.

29. LUND’S FISHERIES, INC., operates 15 fishing vessels out of Cape May, New Jersey and lands their catches at Lund’s Cape May facility. Among the species fished and processed by Lund’s Fisheries include scallops, squid, fluke (summer flounder) and black sea bass. Lund’s Fisheries fishes in the NY Bight and in the Empire Wind Lease Area. Lund’s Fisheries is injured because construction of WTGs and their operation under Lease OCS-A-0512 will result in the cessation of commercial fishing activities in the Empire Wind lease area, on which Lund’s Fisheries depends for a portion of its revenues.

30. Plaintiff the Hon. JOHN A. PETERSON, Jr., is the Mayor of Seaside Park, New Jersey that is home to many fishermen and fishing businesses that will be impacted by the

cessation of fishing in the vicinity of the Empire Wind. Mayor Peterson has a long history of advocating for the interests of the fishing industry community in his municipality. Mayor Peterson is responsible for the economic health of his municipality and the loss of commercial and recreational fishing business in the NY Bight is directly within the scope of his governmental concerns and duties.

31. Defendant UNITED STATES OF AMERICA is authorized by Congress to issue leases and permits through its various agencies for offshore wind turbine projects and to regulate and supervise such projects through the Department of the Interior and its sub-agency the Bureau of Ocean Energy Management (“BOEM”).

32. Defendant DOUG BURGUM is the Secretary of the Interior and issued the April 16, 2025 instruction to the Director of BOEM to stop work on the Empire Wind project and then instructed the Director of BOEM to issue the “Amendment” dated May 19, 2025 to allow work to resume on Empire Wind. Defendant Burgum has also been directed by the President via the Presidential Memorandum dated January 20, 2024 to investigate all pending and permitted offshore wind projects to determine if they have been adequately reviewed and investigated. 90 Fed. Reg. 8363 (January 29, 2025).

33. Defendant BOEM is the agency in the Department of the Interior that is charged by statute with the duty to approve leases and permits for offshore wind generation turbines and their related facilities (WTGs) and issued the lease and permit for the Empire Wind projects. BOEM is also charged under the National Environmental Policy Act (EPA) with the duty to issue a Final Environmental Impact Statement (FEIS) and prepared a Draft Environmental Impact

Statement (DEIS) to review ecological and related issues in connection with any WTG proposed project and did so with respect to the Empire Wind project.

34. Defendant WALTER D. CRUICKSHANK, PH.D., is Acting Director of BOEM and has the executive capacity to carry out its regulatory and statutory duties and issued and signed the Director's Order dated April 16, 2025 that ordered all work on Empire Wind to cease pursuant to the President's Memorandum of January 20, 2025. On or about May 19, 2025, Defendant Cruickshank issued and signed the "Amendment to Director's Order dated April 16, 2025" that reinstated, without explanation, the Empire Wind work permits.

35. Defendant EMPIRE LEASEHOLDER LLC is the title owner of OCS-A-0512, the lease for the Empire Wind Lease Area (the "Lease Area"), located in the Atlantic Ocean 14 statute miles offshore of Long Island, New York and 19.5 statute miles off of Long Branch, New Jersey with project elements overlapping with Cholera Bank and extending through NY nearshore/estuarine waters including Upper Bay, The Narrows, Lower Bay/Gravesend Bay, Wreck Lead (Reynolds) Channel, and Barnums Island Channel and adjacent waters and wetlands; the project is expected to construct in the Lease Area, when fully built, 147 monopile offshore turbine structures, along with associated offshore substations, a 299-mile submarine transmission network of intermarry cables and other onshore and offshore facilities.

36. Defendants EMPIRE OFFSHORE WIND LLC and EMPIRE WIND 2 LLC are the Designated Operators (DOs) with full authority to act on behalf of defendant EMPIRE LEASEHOLDER LLC in connection with wind turbine development in the Lease Area.

37. Defendant EQUINOR US is a corporation with offices in Boston, Massachusetts and Stamford, Connecticut and is the sole owner of defendants EMPIRE OFFSHORE WIND LLC, EMPIRE WIND 2 LLC and EMPIRE LEASEHOLDER LLC.

38. In the alternative, Equinor US is a wholly-owned division of Equinor ASA.

39. Defendant EQUINOR ASA is a Norwegian Corporation located in Stavanger, Norway that is majority owned by the Government of Norway that holds 67% of the shares of Equinor ASA. and is the sole owner of EQUINOR US and the Empire Wind LLCs referred to above.

40. Defendant KINGDOM OF NORWAY is the controlling owner of Equinor and all of its affiliates and entities and maintains “active” governmental control of Equinor’s business decisions; the Kingdom is a necessary party to this action as to the assertions in the First Count that Equinor is not entitled or eligible for a lease in the U.S. Outer Continental Shelf as it is the agency or instrumentality of a foreign government.

FIRST COUNT
(EQUINOR’S LEASE FROM BOEM IS ILLEGAL AND IS NOT AUTHORIZED UNDER
OCSLA, 43 U.S.C. 1331, ET SEQ.)

Foreign Governments are not Authorized to Lease under OCSLA

41. By its terms, OCSLA does not allow a foreign government or instrumentality to acquire a lease on the outer continental shelf.

42. Under OCSLA, a “commercial lease” is the instrument that defines “the terms and conditions under which *a person* can conduct commercial activities” on the outer continental shelf. 30 C.F.R. 285.112 [emphasis added].

43. In turn, the term “person” is defined as follows:

The term “person” includes, in addition to a natural person, an association, a State, a political subdivision of a State, or a private, public, or municipal corporation.

43 U.S.C. § 1331 (d).

44. Under the OCSLA regulations, the term “person” is defined in the same manner as in the statute:

Person means, in addition to a natural person, an association (including partnerships and joint ventures); a federal agency; a State; a political subdivision of a State; a Native American Tribal government; or a public, private, or municipal corporation.

30 CFR 285.112.

45. As the statutory and regulatory definition shows, a foreign government or its instrumentality is not among the “persons” who may receive a lease from BOEM for generation of electricity on submerged lands on the Outer Continental Shelf.¹

Equinor Is An Agency or Instrumentality of A Foreign State

46. Defendant Equinor ASA is an instrumentality or agency of the Kingdom of Norway (“Norway” or the “Norwegian State”) and is under Norway’s control and dominance. In this Complaint the term “Equinor” refers to Equinor ASA and all Equinor and Empire Wind entities named in this Complaint.

¹ Similarly, a “State” is defined in the statute as being one of several U.S. entities but does **not** extend to a “foreign” state. Under OCSLA, a “State” is defined as follows:

- (1) each of the several States;
- (2) the Commonwealth of Puerto Rico;
- (3) Guam;
- (4) American Samoa;
- (5) the United States Virgin Islands; and
- (6) the Commonwealth of the Northern Mariana Islands.

43 U.S.C. § 1331 (s).

47. As an agency or instrumentality of Norway, Equinor cannot receive a lease on the Outer Continental Shelf for offshore wind turbine development or generation of electric power.

48. Norway owns 67% of Equinor's stock directly and maintains active control over the company's business affairs as it has declared in Norway's 2023 State Paper, "Greener and more active state ownership". *See* Meld. St. 6 (2022–2023) Report to the Storting² (White Paper), annexed hereto; <https://www.regjeringen.no/en/dokumenter/meld.-st.-6-20222023/id2937164/?ch=1> (accessed May 31, 2025)[referred to herein as "White Paper"].

49. In the White Paper, Norway describes its "active" management and direction of state-owned entities such as Equinor:

The State being an active owner means that the State, within the framework conditions for the State's exercise of ownership, works to ensure that the company has good goal attainment. The State achieves this by having explicit goals as owner in each company, setting clear expectations of the companies, and by following up the companies' goal attainment and efforts regarding the State's expectations. Follow-up typically takes place through voting at the general meeting, including election of board members, and other means of exercising ownership. Owner dialogue with the Board and management is a key part of exercising ownership. Among other things, owner dialogue enables the State to ask questions that are relevant to the company's long-term potential for generating a return. As part of the exercise of ownership, the State may also present shareholder proposals. The State regularly considers participating in transactions that contribute to achieving the State's goal as an owner. The fact that the State as an owner has a long-term perspective means that the State is focussed on the companies being managed in such a way that they generate high returns and good goal attainment in the long term.

White Paper, "Greener and more active state ownership, §1.1, annexed hereto at 7 (accessed May 31, 2025).

50. Norway maintains active control of Equinor, and actively directs its management and business affairs, as described below (beyond the assertions set forth in this Complaint, plaintiffs

² The Storting is Norway's parliament.

reserve further factual statements until discovery is completed as to Norway's control of Equinor).

51. Equinor acknowledges active Norway government control of its business activities and has linked the Norway "White Paper" to its corporate web site; *see* <https://www.equinor.com/about-us/the-norwegian-state-as-shareholder#:~:text=With%20a%20holding%20of%2067,of%20Trade%2C%20Industry%20and%20Fisheries> (directing visitors to "The Norwegian state's ownership report")(accessed May 31, 2025); the White Paper is annexed as Exhibit D.

52. Since its establishment in 1972 as Den norske stats olje- selskap (later "Statoil" and then renamed "Equinor"), Norway has operated Equinor as a instrument of state policy in developing energy resources.

53. Until 2001 Equinor was 100% owned by Norway; at that time Norway amended Equinor's articles of association to allow the sale of 29.4% of its shares to private shareholders.

54. In practice and in structure, Equinor remains a state-owned and controlled entity with the Norway government exercising control with a super majority ownership interest that has rights and privileges not available to other shareholders.

55. Private shareholders in Equinor have no legal capacity to direct or control Equinor's affairs.

56. Norway actually owns 70.6% of Equinor's shares because in addition to the 67% owned by the Ministry of Fisheries, Trade and Industry, an additional 3.6% is owned by the Norway Folketrygdfondet, the government-owned National Insurance Fund.

57. By ownership of a total of 70.6% of the company, Norway controls the election and appointment of Equinor's Board members and all matters raised or that can be raised at its general meetings.

58. To maintain this control, Norway inserted a condition in Equinor's articles of association that its share ownership can never be diluted and that Equinor is prevented from issuing shares or raising capital without the government's direct consent. Equinor, Annual Report, 2021 at 57.

59. Norway's State ownership interest is also protected by a pre-condition of its articles of association that no repurchase of shares can reduce or diminish the Norwegian State's interest and control from its 67% ownership position. Equinor, Annual Report, 2021 at 125. The ability to reduce Norway's shares "is subject to parliamentary decree". *Id.* at 175. This condition does to apply to Equinor's minority shareholders who have no such protection.

60. Norway has the exclusive power to amend Equinor's articles of incorporation, as Equinor has admitted in its annual reports:

Since the Norwegian State, acting through the Norwegian Minister of Petroleum and Energy, has in excess of two-thirds of the shares in the company, it has sole power to amend our articles of association. In addition, as majority shareholder, the Norwegian State has the power to control any decision at general meetings of our shareholders that requires a majority vote, including the election of the majority of the corporate assembly, which has the power to elect our board of directors and approve the dividend proposed by the board of directors.

Equinor, Annual Report, 2021 at 311.

61. The Norwegian State may veto any resolution of the Board or the annual or other periodic meetings: "As long as the Norwegian State owns more than one-third of our shares, it

will be able to prevent any amendments to our articles of association.” *Equinor, Annual Report, 2021* at 311.

62. Equinor acknowledges that it is subject to Norwegian government and political control and will experience changes in its operation if it acts contrary to the expectation of the Norway government:

Norwegian State’s exercise of ownership. *Failure to deliver on expectations from the Parliament and the Ministry of Trade, Industry and Fisheries (MTIF), and failure to deliver on societal and political expectations in general could impact the manner which the Norwegian State exercises its ownership of the company.*

Equinor, Annual Report, 2021 at 100 [highlighting and italics in original].

63. Equinor is not independent of Norway and is subject to demands of the Norwegian State that can be contrary to the interests of its minority shareholders, as Equinor cautioned in its annual report:

Control by the Norwegian State. *The interests of Equinor’s majority shareholder, the Norwegian State, may not always be aligned with the interests of Equinor’s other shareholders, and this may affect Equinor’s activities, including its decisions relating to the NCS [Norwegian Continental Shelf].*

The Norwegian State has resolved that its shares in Equinor and the SDFI’s interest in NCS licences must be managed in accordance with a coordinated ownership strategy for the Norwegian State’s oil and gas interests. Under this strategy, the Norwegian State has required Equinor to market the Norwegian State’s oil and gas together with Equinor’s own oil and gas as a single economic unit. Pursuant to this coordinated ownership strategy, the Norwegian State requires Equinor, in its activities on the NCS, to take account of the Norwegian State’s interests in all decisions that may affect the marketing of Equinor’s own and the Norwegian State’s oil and gas.

The Norwegian State directly held 67% of Equinor’s ordinary shares as of 31 December 2021 and has effectively the power to influence the outcome of any vote of shareholders, including amending its articles of association and electing all non- employee members of the corporate assembly. The interests of the Norwegian State in deciding these and other matters and the factors it considers when casting its votes, especially the coordinated ownership strategy for the SDFI and Equinor’s shares held by the Norwegian State, could be different from the interests of Equinor’s other shareholders.

Equinor, Annual Report, 2021 at 105 [highlighting and italics in original][bracketed text added].

64. Equinor is not a free agent that can decide for its own account how to market and sell; Equinor is required to market and sell Norwegian State-owned oil and must do so on terms dictated by the Norwegian State as per the controlling articles in Equinor's articles of association; the articles were imposed on Equinor by Norway in its ownership capacity; these articles are known as the "Owner's Instruction", referring to the Norwegian State as the "Owner" of Equinor. Equinor, Annual Report, 2021 at 59.

65. Norway's government has unique and privileged access to Equinor's executives that is not available to the minority shareholders. Equinor has meetings with the Ministry of Fisheries, Trade and Industry at which other shareholders are not present. At these meetings subjects are discussed directly relating to the management of the business:

Topics discussed includes Equinor's economic and strategic development, sustainability and the State's expectations regarding results and returns on investments.

Equinor, Annual Report, 2021 at 126.

66. Norway's government has the special privilege of demanding and receiving "insider information" in order to present matters to the Storting, Norway's parliament. Equinor, Annual Report, 2021 at 126.³

³ For purposes of reference, this Complaint cites to the Equinor ASA 2021 Annual Report but similar statements are contained in the company's most recent 2024 Annual Report (<https://cdn.equinor.com/files/h61q9gi9/global/16ccbc5a098c3b971979118420c4f83ddee18fb4.pdf>) and its Board Statement on Governance (<https://cdn.equinor.com/files/h61q9gi9/global/02e24d3d45ba12dfd3aa4492dca8514a86ffcbc4.pdf>) (<https://cdn.equinor.com/files/h61q9gi9/global/02e24d3d45ba12dfd3aa4492dca8514a86ffcbc4.pdf>) (2024-board-statement-on-corporate-governance-equinor.pdf).

67. Equinor is, therefore, an instrumentality or agency of a foreign government and is not within the scope of authorized licensees under OCSLA.

68. Accordingly, the lease to Equinox and its affiliates for Lease Area OCS-A-0512 and all related permits are illegal, void, voidable or should be vacated.

WHEREFORE, judgment is sought declaring that the lease to lease area OCS-A-0512 to Equinor and its affiliates is not authorized by OCSLA;

WHEREFORE, injunctive relief is sought vacating and extinguishing the Equinor lease and all related permits and authorizations, along with such other relief as to the Court may seem just and proper.

SECOND COUNT
(VIOLATION OF ADMINISTRATIVE PROCEDURE ACT (APA),
5 U.S.C. § 701-706, et seq.)

69. On or about April 16, 2025, defendant the Hon. Doug Burgum, Secretary of the Interior, directed BOEM to issue a stop work order as to the Empire Wind offshore wind turbine projects in the New York Wind Energy Area (WEA).

70. Secretary Burgum directed the stop work order based on President Donald Trump's Presidential Memorandum dated January 20, 2025 directing that the Secretary engage in an immediate investigation of all offshore wind programs for which permits had been issued. The stop work order is directly premised on the environmental concerns expressed in the Presidential Memorandum:

The Bureau of Ocean Energy Management (BOEM) is issuing this Director's Order to Empire Offshore Wind LLC to halt all ongoing activities related to the Empire Wind Project on the outer continental shelf to allow time for it to address feedback it has received, including from the National Oceanic and Atmospheric Administration (NOAA),

about the environmental analyses for that project. BOEM received this and other feedback regarding Empire Wind as an outgrowth of the review that the Department is engaged in related to offshore wind projects. See the President’s Memorandum of January 20, 2025. 90 Fed. Reg. 8363 (January 29, 2025).

Stop Work Order, April 16, 2025, annexed hereto.

71. The Stop Work Order expressly directs that no further work may take place on the Empire Wind project “until ... BOEM has completed its necessary review.” Stop Work Order, April 16, 2025, annexed hereto.

72. The President’s Memorandum premised such investigation on concerns of insufficient and rushed regulatory review over offshore wind projects

73. Specifically the Presidential Memorandum referred to deficiencies in such prior review including:

“...legal deficiencies underlying the Federal Government’s leasing and permitting of onshore and offshore wind projects, the consequences of which may lead to grave harm — including negative impacts on navigational safety interests, transportation interests, national security interests, commercial interests, and marine mammals — and in light of potential inadequacies in various environmental reviews required by the National Environmental Policy Act to lease or permit wind projects,...

Presidential Memorandum, January 20, 2025.

74. BOEM never completed its “necessary review”, *see* Stop Work Order, April 16, 2025, and, instead, reinstated the Empire Wind work permit on May 19, 2025 without any explanation or finding, stating as follows:

On April 16, 2025, the Bureau of Ocean Energy Management issued a Director’s Order to Empire Offshore Wind LLC to halt all ongoing activities related to the Empire Wind Project on the outer continental shelf. That Order is hereby amended to lift the halt on activities during the ongoing review.

BOEM, Amendment to Director’s Order of April 16, 2025, dated May 19, 2025, annexed.

75. No finding as to any investigation by BOEM is referenced and no basis in fact is asserted for the reinstatement of the Empire Wind work orders.

76. As discussed in this Complaint, *infra*, the concerns raised by the President in the Presidential Memorandum and in the BOEM Director's stop work order were well-grounded as to the lack of adequate investigation and environmental consequences of the offshore wind programs and are reflected in the record, as discussed below.

77. As such, a proper factual basis existed for the Director's April 16, 2025 stop work order and the requirement of further investigation of the Empire Wind program.

78. No factual basis is stated or identified to support the BOEM Director's May 19, 2025 "Amendment" reinstating the Empire Wind permits. Amendment to Director's Order of April 16, 2025, dated May 19, 2025, annexed.

79. In that no factual basis was asserted for the reinstatement of the Empire Wind work orders and the "necessary investigation" was neither conducted nor reported, the Amendment to Director's Order of April 16, 2025 violates the Administrative Procedure Act (APA), 5 U.S.C. § 5 U.S.C. §701-706, et seq., as it is arbitrary, capricious and/or unreasonable and is not grounded in any asserted factual basis.

80. The record of the Empire Wind approval, including the United States Coast Guard analysis, the National Marine Fisheries Assessment, the NOAA assessment and the Final Environmental Impact State (EIS), among others, reflect extensive environmental, ecological, visual and economic harm that is not remediated, is left for future determination, is unresolved and undetermined or is deemed not capable of scientific resolution due to the absence of

adequate scientific knowledge, all of which supports the Presidential Memorandum's concern that the prior permits were the product of inadequate investigation and review.

81. That record is discussed, in part, below.

UNITED STATES COAST GUARD ANALYSIS AS TO NAVIGATIONAL CONFLICTS

82. The United States Coast Guard (USCG) has opposed the proposed construction of the Empire Wind projects due to their interference with navigation, both maritime and military.

83. USCG's "Risk Assessment" recommends placement of turbine structures at least two (2) nautical miles (nm) from the edge of the maritime traffic lanes in contrast to Empire's one (1) nm separation from the structures and the sea lanes, giving rise to what USCG calls a "medium to high" or "high risk" for collisions.

84. In its September 28, 2015 guidance, the USCG recommends "placing permanent structures at least 2 NM from the outer edge of a TSS and 5 NM from the entry/ext of the Hudson Canyon to Amboy TS and the Ambrose to Nantucket TSS." The USCG guidance is incorporated herein as Exhibit E.

85. By this finding, the USCG is recommending that the proposed plan for Empire Wind is dangerous and posed severe navigational risks and must be adjusted to reflect substantially greater distance between the project and navigational lanes and entries and exists.

86. The recommendation from the Coast Guard is not included in BOEM's approved plans and Record of Decision for the Empire Wind project.

87. The Secretary has not explained or offered any substantiation as to why he believes these conflicts have been resolved to support the May 19, 2025 reinstatement of work permits.

88. As such, the record demonstrates an incomplete or inadequate review as to navigational hazards caused by the conjunction of shipping lanes and the Empire Wind turbine structures that supports the President's concerns as to insufficient review and investigation and the Secretary's April 16, 2025 revocation of work permits for Empire Wind.

89. The Director's May 19, 2025 "Amendment" that restored the work permits fails to explain why BOEM *now* finds that there is no longer a need for further review and, as such, the May 19, 2025 "Amendment" is arbitrary, capricious and unreasonable and unsupported by the record.

HIGH FREQUENCY (HF) RADAR INTERFERENCE AS NAVIGATION HAZARD

90. NOAA (the National Oceanic and Atmospheric Administration) has told BOEM that the Empire Wind lease area poses a clear and distinct hazard to high frequency (HF) radar operation in the New York Bight that includes the coastal zone off Long Island and waters off New Jersey's coast.

91. The HF radar is used by the commercial fishery and other maritime traffic.

92. On July 14, 2014, NOAA's National Ocean Service Integrated Ocean Observing System Director Willis sent BOEM a letter in response to BOEM's Call for Information on the Equinor Empire Wind lease area that stated:

"There are eleven (11) high frequency (HF) radars in New Jersey, New York and Rhode Island that will be negatively impacted to some degree or another by wind turbines situated offshore Long Island. This would result in a loss of coastal radar monitoring for 100 miles of the NY, NJ and RI coasts. HF radars are used operationally by the US Coast Guard for search and rescue and by NOAA for oil spill response. Both these applications require 24/7/365 operations unimpeded by external interference to the HF radar signal."

NOAA, Assessment, July 14, 2014, annexed hereto as Exhibit F.

93. In the July 14, 2014 comment, Director Willis expressly referred to the lack of scientific information as to the effect of interference with HF radar from wind turbine structures. Director Willis stated that simulations of turbine interference with radar demonstrate the likelihood of interference and that mitigation measures must be understood and studied *before* implementation of any turbine lease:

Two recent simulations of offshore wind turbine interaction with HF coastal radar operation (Teague, 2012, <http://www.oceans12mtsieehamptonroads.org/index.cfm>; Naqvi and Ling, DOE Study DEEE0005380) indicate that rotating turbine blades will cause some degree of interference with HF radar data and that this interference will require mitigation techniques.”

NOAA, Assessment, July 14, 2014, annexed hereto.

94. NOAA went on make it clear that actual “real-world” knowledge as to these impacts are not known but that studies must be “refined” to safely implement any turbine project:

“The signature and impact of turbine blade rotation on HF radar data processing are not currently characterized from real-world situations, and simulation data only recent exist. Simulations of turbine impacts must be refined to include details of actual turbine construction materials and operating parameters. Thee simulations and real-world data will inform regulators of the extent to which mitigation techniques will be required for unimpeded HF radar operation.”

NOAA, Assessment, July 14, 2014, annexed hereto.

95. Put in ordinary English, NOAA has told BOEM that the proposed turbine structure will interfere with the operation of the 11 High Frequency radar installations that protect navigation and make rescue possible in the New York Bight and along the New Jersey coast.

96. NOAA has thus concluded that further study is needed before the structures could be emplaced to determine the safety hazard from radar interference.

97. BOEM has not implemented NOAA's findings and no study has been identified by BOEM to rectify or resolve these issues and no actual mitigation measures have been identified or included in the Empire Wind project or its Record of Decision or FEIS that will resolve the concerns as to the interference with HF radar.

97(A). As such, the record demonstrates an incomplete or inadequate review as to navigational hazards caused by the likelihood of interference with HF radar to be caused by the Empire Wind turbine structures.

97(B). In fact, BOEM admits in the Record of Decision that HF radar interference from the Empire Wind project poses a "risk to public health, safety and the environment". Record of Decision, Appendix A, p. A-25; see Record of Decision, Exhibit G hereto. With this admission, BOEM stipulates that "Lessee must mitigate unacceptable interference with IOOS HF radar from the Project." *Id.* However, this as yet unidentified "mitigation" is to be developed by Empire Wind *after* the project is already approved and undergoing construction. The Record of Decision thus allows full construction of the Project to proceed despite having no concrete solution to a problem that BOEM itself admits is "a risk to public health, safety and the environment", i.e., the blade interference with HF radar. This is the very definition of a rushed approval that the President, the Secretary and the Director all agreed required issuance of the the April 16, 2025 stop work order.

98. This record supports the President’s concern as to insufficient review and investigation and the Secretary’s April 16, 2025 revocation of work permits for Empire Wind until further investigation is completed.

99. The Director’s May 19, 2025 “Amendment” that restored the work permits fails to explain why BOEM now finds there is no longer a need for further review, making the May 19, 2025 “Amendment” arbitrary, capricious and unreasonable and unsupported by the record.

DEPARTMENT OF ENERGY (DOE) 2020 STUDY AS TO HIGH FREQUENCY RADAR INTERFERENCE FROM THE EMPIRE WIND PROPOSALS

100. In 2020, the Department of Energy (DOE) held a series of webinars detailing the issues posed to HF radar from the Empire Wind proposal.

101. On July 27, 2020 DOE conducted a webinar detailing the implications raised in NOAA’s July 14, 2024 letter to BOEM and explained how the United States Coast Guard uses the surface current monitoring on HF radars to implement search and rescue missions that is necessary for the safety of mariners, including commercial fishers. The DOE study and its relevant maps and slides are incorporated as Exhibit H hereto.

102. DOE produced slides demonstrating the projected effect on HF radar from the turbine projects in the Bight and along the New Jersey coast.

103. These demonstration slides show *before* and *after* demonstrations of HF radar coverage, i.e., with “No Interference” and “With Interference”; the slides depict in darker vector markings the presence of HF radar coverage *before* turbine construction and the absence of radar coverage *after* construction of the Empire Wind turbines.

104. The maps depict, *before* construction of the WTGs, heavy HF vector confluence at the area of the Empire Winds project (depicted in a triangle just below Long Island in the upper part of the maps).

105. Conversely, the maps depict, *after* construction, the complete loss of coverage (as show by the absence of any of the dark vector markings).

106. As the maps show, in the immediate area and in the vicinity of the Empire Wind project, there will be virtually no HF radar vectors and no coverage for mariners and commercial fishers.

107. BOEM proceeded to issue the permit for Empire Wind 1 and 2 in the face of this evidence of HF radar loss by two cognate and expert agencies, NOAA and DOE.

108. BOEM has made no finding that DOE and NOAA are incorrect or that there are any mitigation measures in place or proposed as to the loss of HF radar coverage interference.

109. BOEM has made no finding to substantially dispute the DOE and NOAA conclusions that the projected interference with HF radar coverage will cause safety, navigational and rescue hazards arising from the Empire Wind project.

110. For these further reasons, the record demonstrates an incomplete or inadequate review by BOEM that supports the Secretary's April 16, 2025 revocation of work permits for Empire Wind.

111. The Secretary and the BOEM director have not explained or offered any substantiation as to why BOEM *now* believes these conflicts have been resolved to support the May 19, 2025 reinstatement of work permits and the May 19, 2025 reinstatement of work permits is arbitrary, capricious or unreasonable or is unsupported by the record.

National Marine Fisheries Service Symposium On Offshore Wind Development

112. At the State of the Science symposium on offshore wind in July of 2024, the National Marine Fisheries Service (informally known as NOAA Fisheries) presented the “constraints” it is experiencing in attempting to create ecosystem models to assess the impact of offshore wind development (“OWD”).

113. During a panel on environmental impact assessment, the Chief of NMFS’s Offshore Wind Energy Branch presented the following “constraints” to properly modeling the impacts of OWD:

- Limited empirical data to ground truth, calibrate, or validate models
- Limited species specific and life stage specific data available
- Limited knowledge on the spatial extent of impact producing factors
- Most published studies are from a few locations in Europe which are not directly comparable to Northeast U.S. shelf ecosystem
- Limited knowledge of the spatial scale of biological impacts
- High levels of uncertainty for individual effects and for cumulative effects
- Limited information on how OWD development will interact with other ecosystem stressors
- Limited ability to integrate across OWD development because different methods and approaches are used to collect data
- Access to data collected by numerous project monitoring programs
- No established monitoring programs for socio economic impacts from OWD development.”

Andrew Lipsky, NOAA Fisheries Chief, Offshore Wind Ecology Branch, *Symposium: Progression Toward an Integrated Ecosystem Based Approach to Assessing Environmental Impact of Offshore Energy Development* (July 18, 2024) (presentation available at YouTube, <https://tinyurl.com/OSWconstraints>; see slide and remarks at 53:58-55:33), incorporated herein as Exhibit I, hereto.

114. Fisheries Chief Lipsky concluded by stating there is a “design challenge” to fill the above-referenced data gaps “so we can make sure our models are [grounded] in understanding what really is happening in the ocean”. *Id.*

115. Empire Wind’s environment review and permitting was completed as of March 11, 2024, several months before NFMS made the above admissions as to the inadequacies of environmental impact review. See <https://www.permits.performance.gov/permitting-project/fast-41-covered-projects/empire-wind-energy-project>, incorporated herein as Exhibit J.

116. As stated in Paragraph 70 above, the Presidential Memorandum stated concerns as to the “potential inadequacies in various environmental reviews...to lease or permit wind projects”. Presidential Memorandum, January 20, 2025.

117. In accordance with the Presidential Memorandum, BOEM issued the April 16, 2025 Stop Work Order specifically to, *inter alia*, review feedback it received from NOAA about the environmental analyses” of the Empire Wind project.

118. BOEM lifted the Stop Work Order on May 19, 2025 without completing its review, which BOEM says is ongoing.

119. By lifting the Stop Work Order without addressing the inadequacies of NMFS’s review of Empire Wind, BOEM has acted in an arbitrary, capricious and unreasonable manner or in a manner that is unsupported by the record.

**NATIONAL MARINE FISHERIES SERVICE (NMFS) ASSESSMENT OF
ECOLOGICAL AND OTHER IMPACTS FROM THE EMPIRE WIND PROJECT**

120. In January 2023, the National Marine Fisheries Service (NMFS) issued its findings and report on the Empire Wind project.

121. In that report, NMFS identified significant areas of ecological and economic injury to be caused by the turbine structures.

122. NMFS reviewed the July 5, 2023 Essential Fish Habitat (EFH) assessment provided by BOEM as to Empire Wind 1 and 2 located in Lease Area ICS-A-0512, 14 miles south of Long Island, New York and 19.5 miles off the coast of New Jersey, in the center of the NY Bight.

123. NMFS identified ecological, environmental and economic problems from the Empire Wind project and concluded that “the proposed project will result in significant adverse impacts to EFH, federally-managed species, their prey, and other resources under our purview.” NMFS, Assessment at 1-2, annexed as Exhibit K.

124. As to Cholera Bank, an “important, regional bathymetric feature that provides important fisheries habitat”, NMFS found that Wind Turbine Generators (WTGs) B01, C01, B02, D02, B03, and D03 **must** be moved “to avoid an minimize adverse impacts to Cholera Bank”. NMFS, Assessment at 3.

125. The agency also found that “WTGs, Offshore Substations (OSSs) and cables (interarray, interlink, and export) should be micro-sited/sited to avoid sensitive benthic habitats”...” NMFS, Assessment at 3-4.

126. This was another recommendation to protect the sea bed ecology and ecosystem that BOEM failed to act on nor did BOEM develop the micro-sitng plan to protect the benthic resources that NMFS found was necessary.

127. BOEM did not require that the WTGs be moved and did not resolve these issues in the ROD for Empire Wind or in the FEIS.

128. Instead, BOEM rejected the findings of NMFS and its request that the structures be moved or re-sited, what BOEM calls Alternatives “B” and “E”, on the singular ground that to

do so would prevent Empire Wind from generating sufficient power to meet its contract with New York State: "...selection of Alternative B [and E] would not allow Empire Wind to install the minimum number of WTGs necessary to fulfill Empire's contractual obligations with NYSERDA [the New York State power agency]". See Record of Decision (ROD), November 2023 at 10-11, annexed hereto.

129. BOEM did not dispute the scientific concerns raised by NMFS as to the impact of the structures on Cholera Bank or on the benthic ecology of the site, demonstrating that an unresolved scientific and ecological concern remains as to these issue that supports the April 16, 2025 revocation of work permits.

130. No finding appears in the May 19, 2025 restoration of work permits as to these issues or that resolves these issues, making the May 19, 2025 "Amendment" arbitrary, capricious and unreasonable or unsupported by the record.

131. Other changes were identified by NMFS to protect the ecology and ecosystem of the fishery but were not commented on by BOEM or adopted by BOEM *and are still unresolved*. NMFS, Assessment at 3-6.

132. NMFS found that BOEM did not provide adequate documentation to "fully escape each element of the proposed action or consider or evaluate fully all of the direct, indirect, individual, and synergistic adverse impacts to EFH in the project area that are likely to occur from the construction, operation, maintenance, and decommissioning of the Empire Wind project." NMFS, Assessment at 2.

133. Due to the absence of such research and documentation, NMFS concluded that there are significant concerns as to the adverse impacts to be caused by the Empire Wind project:

We have significant concerns with the environmental implications of developing sensitive ecological areas without a full evaluation of adverse impacts or measures to avoid and minimize adverse impacts, particularly impacts to Cholera Bank and estuarine habitats within the OEC corridors. In addition, substantial uncertainties remain regarding the impacts to oceanographic processes (including potential impacts to the Mid-Atlantic Cold Pool), hydrodynamics, primary and secondary productivity, and predator-prey relationships that may result from this project and others cumulatively across the Mid-Atlantic and New England. As a result, the full suite of adverse effects cannot be fully identified, understood, or evaluated. **Consequently, there may be significant effects on EFH and other NOAA trust resources for which insufficient data is available for the ecological consequences to be fully understood and for EFH conservation recommendations to be developed at this time.**

NMFS, Assessment at 2 [emphasis added].

134. NMFS observed that the current plan (later adopted by BOEM) for Empire Wind did not adequately “incorporate sufficient samples and replications to identify potential changes to benthic features, habitat complexity, and associated macrobenthic communities (including invasive species [e.g., *Didemnum vexillum*] growth) across and within each habitat type in the project area, including the artificial substrates to be constructed.” NMFS, Assessment at 8.

135. In addition, NMFS concluded that to resolve scientific uncertainties before any construction or installation would proceed, it would be necessary to obtain three-years of pre-construction data as to acoustic conditions in the habitat area. This has not been undertaken by BOEM and no explanation by BOEM has been issued as to why it disregarded NMFS’s recommendation.

136. In other words, BOEM has not made a complete study of the ecological and environmental impacts to be caused to the fishery resources in the New York Bight region by the Empire Wind turbines.

137. The absence of an adequate study of the impacts to be caused by the Empire Wind projects is precisely the reason the Secretary originally halted the work permits.

138. No documentation has been provided by BOEM to address the lack of adequate study identified by NMFS; as such, BOEM's review remains incomplete, as the Secretary originally concluded in the stop work order and no proper administrative basis exists for the May 19, 2025 restoration of the work permits, making the May 19, 2025 restoration order arbitrary, capricious and unreasonable or unsupported by the record.

**MAJOR ECOLOGICAL HARM ASSESSED BY NMFS SUPPORTS THE
SECRETARY'S APRIL 16, 2025 STOP WORK ORDER**

139. NMFS stated its disagreement with BOEM's conclusion that injuries to fish populations and habitat can be mediated by what BOEM calls the "artificial reef" effect:

We are concerned that the EFH assessment emphasizes potential benefits of habitat conversion resulting from the placement of WTGs and scour protection due to the potential artificial reef effect. **We disagree with this characterization and the assertion that any artificial reef effect is primarily beneficial.**

NMFS, Appendix at 6 [emphasis added], included as part of Exhibit K.

140. NMFS disputes the "artificial reef" concept adopted by BOEM that the turbine structures may provide reef effects to encourage fish production.

141. In its 2023 assessment, NMFS concludes that the addition of hard surface to the sea floor to be caused by the turbine structures will damage permanently the ecology of the Cholera Banks sub-surface region and habitat and its ecosystem:

The addition of artificial hard substrate that is typically uniform and angular/jagged to protect WTG and OSS foundations and cables in existing complex rocky and shell habitats will result in a loss of both physical and biological structural complexity provided previously by those habitats. It is also expected to cause shifts in the community composition of fishes, as these substrates often do not mimic natural rocky habitat. The

type and attributes of artificial hard substrates will be an important factor in how fish species may use these artificial substrates. As previously discussed, natural rocky habitats are inherently complex and multiple managed fish species have life history stages that are dependent on, or mediated by, rocky habitats and their intrinsic fine-scale attributes (Gotceitas et al. 1995, Lindholm et al. 1999, Methratta and Link 2006). Rocky habitats also provide a substrate for macroalgal and epibenthic growth that can increase the functional value of these habitats as refuge for juvenile fish. It takes years to decades to establish the epifauna and macroalgae that play an important role in mediating the spatial distribution and success of multiple managed fish species, thus the addition of artificial substrates is not expected to replace the functions and values of natural habitats, particularly for juvenile species.

NMFS, 2023 Appendix at 6.

142. By this assessment, NMFS disputes BOEM’s conclusion that the turbine structures will create a reef effect to compensate for loss of natural soft bottom fish habitat.

143. The NMFS assessment identifies species loss that will follow the conversion of the seabed from soft to hard bottom including the loss of including Atlantic surf clam, sea scallop, and ocean quahog, major species of the east coast. NMFS, Appendix at 7.

144. Following the conversion of the seabed, the Assessment notes the potential for “establishment or [] expansion of invasive species due to artificial reefs” **but notes that it is not yet possible to “fully evaluate this threat”** and that the presence of invasive species such as *D. Vexillum* can be 2.5 times *greater* on artificial reef “than on natural substrate”. NMFS, Appendix at 7.

145. NMFS concludes that the construction of the WTGs would actually enhance and facilitate invasive species expansion, a major source of environmental harm:

The Empire Wind project poses a risk of expanding invasive colonization in the project area, particularly given the extent of proposed seafloor disturbance in complex habitats. Although this is not considered fully addressed in the EFH assessment, we expect the effects of WTG and cable installation where *D. vexillum* is present could fragment the invasive colonies and facilitate rapid expansion (Morris and Carman 2012). Further, the addition of ew artificial substrate used for cable and scour protection and the presence of

WTG structures may provide habitat for this invasive tunicate in areas where habitat for this species did not previously occur.

NMFS, Appendix at 7-8.

146. The mitigation measure identified by NMFS to avoid such invasive species expansion is to relocate and microsite “WTGs and associated inter-array cables *outside complex habitats.*” NMFS, Appendix at 8 [emphasis added].

147. Nowhere does BOEM in its ROD or its FEIS explain how (or whether) it disputes the expert fishery agency’s findings nor has BOEM relocated the WTGs in the Empire Wind project to mitigate such harms as the fisheries agency has concluded is the appropriate mitigation measure.

148. As such, there remains an incomplete record as to the impact of the artificial reef effect, the injury to the ecology and ecosystem caused by conversion of soft bottom to hard bottom and the likelihood of the entry of invasive species caused by such conversion.

149. This record thus supports the Secretary’s April 16, 2025 administrative decision to pull work permits due to the need for further investigation and no such investigation has been identified to support the May 16, 2025 restoration of work permits, rendering the May 16, 2025 order arbitrary, capricious or unreasonable or unsupported by the record.

150. Among the major fishery species in this region is long fin squid that are known to be sensitive to frequency and sound aggregations that impact mating and other behaviors.

151. NMFS notes that in addition to laboratory studies that demonstrate harm to the species from sound, “Behavioral changes have also been documented in long fin squid in response to pile driving noise.” NMFS, Appendix at 8.

152. The Assessment also documents that spawning and egg laying success may be adversely impacted by the construction and placement of the WTGs:

Longfin squid is a commercial and ecologically important species that may be particularly vulnerable to project impacts as it spawns in the project area by depositing eggs in large clusters on the seafloor.

Longfin squid spawning behavior is distinct and complicated; when arriving near shore, schools of squid will pause at selected locations where a complex system of courtship, mating and communal egg laying arises (Shashar and Hanlon 2013).

NMFS, Appendix at 7.

153. NMFS found that the only way to avoid the permanent injury to squid habitat is to removed the six WTGs: “Removing the six WTGs from Cholera Bank, as mentioned above, will avoid the permanent loss of egg deposition/adult spawning habitat for longfin squid from habitat conversion and will eliminate the construction-related impacts associated with installation of the WTGs and associated cables.” NMFS, Appendix at 9.

154. BOEM has not explained why this mitigation measure is not necessary as to the squid fishery and has only stated that if the six WTGs were removed, the project would not “fulfill Empire’s contractual obligations with the New York State Energy Research and Development Authority (NYSERDA)”. See FEIS, at p. S-7; ROD at 10-11; FEIS annexed as Exhibit M.

155. By this explanation, BOEM did not reject the merits of the NMFS ecological concerns as to the squid fishery that require moving the six WTGs and has failed to investigate these concerns, supporting the Secretary’s April 16, 2025 stop work order; no investigation as to the squid fishery has been identified that would now support the restoration of the work permits as provided in the May 16, 2025 restoration order, further ground why that order is arbitrary, capricious or unreasonable or unsupported by the record.

156. NMFS also found that BOEM is unable to conclude that there will not be negative or adverse impacts on fish habitat to be caused by the turbine structures as “long-term impacts of

new introduced artificial reef material associated with offshore wind farms is still not fully understood.” NMFS, Appendix at 17.

157. Citing a 2016 study, NMFS’s 2023 assessment observes that “Increased fish aggregation around turbine does not necessarily imply net or future population growth for the species (Smith et al. 2016).” *Id.*

158. In other words, the Nation’s fishery expert has concluded that short-term increases of fish population at WTGs may not lead to increased species presence but may have the opposite effect: the presence of pelagic predators such as black sea bass may increase but will cause the population of prey species to synthetically decline and that studies are need to address this issue.

159. NMFS expressly identifies the Block Island WTGs as evidence of the need for studies as to the effect of predator increase after installation of turbine structures:

Turbine foundations at the Block Island Wind Farm attract large numbers of black sea bass, a common resource species that aggregates around structured benthic habitats to feed and reproduce (HDR 2020). This species is expected to benefit from the addition of WTGs and scour protection. However, black sea bass are known to be voracious predators and it is not clear if or how an increase in this species around the WTG would impact sensitive life stages of other fish species including juveniles, eggs, and larvae. **Site specific studies are needed to help understand how changes in fish assemblages in the project area are affecting these sensitive life stages.**

NMFS, Appendix at 17 [emphasis added].

160. As this latter sentence shows, there is simply no documentation available as to whether the changes caused by wind turbine structures will impact these biologically diverse areas, a conclusion that BOEM does not dispute *and that supports the Secretary’s April 2025 decision to suspend Empire Wind work permits due to the inadequate prior investigation.*

161. No additional information has been produced that would justify the Secretary’s May 19, 2025 decision to reverse his decision and reinstate the work permits.

162. Community biological impacts will cumulatively create exponential injuries, the Assessment states, but the ultimate extent of such impacts is still “uncertain”:

Given the scale and scope of development and associated impacts (known, predicted and unknown), there is a tremendous amount of uncertainty regarding the effects of this project and others (individually, cumulatively, and synergistically) along the U.S. Atlantic Coast. However, this uncertainty is not appropriately reflected in the EFH assessment or other project documents (e.g., NEPA documents). It is important to note that uncertainty regarding the nature and scale of the impacts is not equal to having no impacts. The Empire Wind project will cause disturbances on various spatiotemporal scales that interact with one another and other disturbances such as stochastic events (storms), climate change, ocean acidification and others (Fay et al. 2017; Hare et al. 2016; Wiernicki et al. 2020). Multiple overlapping and interacting disturbances have the potential to cause large, nonlinear, or unexpected changes in ecosystem structure and functioning (Buma 2015).

NMFS, Appendix at 16.

163. Citing two recent studies, Miles, et al. (2021) and Tougaard, et al. (2020), NMFS concludes that full extent of harm from the operation of the turbine is unknown and will be enhanced by the multi-layered impacts from construction and installation:

For Empire Wind, the project area (and habitats, species therein) will be subject to decades of operational impacts from [operational] noise, heat, EMF, chemical contaminants, changes to sediment dynamics, hydrodynamics and other oceanographic and atmospheric processes (e.g., Miles et al. 2021; Tougaard et al. 2020), layered atop multiple years of construction-related impacts from pile driving, cable installation, and other actions, all in a climate-change affected ecosystem.

NMFS, Appendix at 16.

164. On this basis, NMFS recommended caution in any WTG development due to the uncertainty of the ecological and environmental implications: “This provides additional support for the need for a precautionary approach to development in the highly productive shelf environment...”. NMFS, Appendix at 16.

165. Impacts on the community biologic environment in the area of the Empire Wind project cannot be predicted, NMFS concluded.

166. Moreover, the Assessment concludes that “early” reports of “offshore wind turbines as biodiversity hotspots should be considered *with caution* as these reports generally refer to the typical species-rich second stage of succession reached after a few years of colonization, *but disappearing later on.*” NMFS, Appendix at 16 [emphasis added].

167. Significant ecological harm is predicted due to the fact that artificially induced “hard” substrates on the seabed cannot substitute biologically for natural soft bottom.

168. Citing recent studies, the Assessment concluded that “their results underline that artificial hard substrata differ greatly from the species-rich natural hard substrata and hence cannot be considered as an alternative for the quantitatively and qualitatively declining natural hard substrata affected by construction and operation of this project. NMFS, Appendix at 16.

169. NMFS concludes that introduction of artificial hard substrate in otherwise soft or sandy areas may result in the presence or aggregations of species not previously located in the area that may contribute to shifts in community composition and biogeochemistry of the surrounding sediment and/or water column (Lefaible et al. 2023; Reubens et al. 2013)”. “Improved or diminished habitat suitability at these scales will affect individual fitness, which may influence population-level changes if enough individuals are affected (Degraer et al. 2020).” NMFS, 2023 Appendix at 16.

170. In simple English, this means that the loss of the natural soft bottom off the Long Island and New Jersey coasts to be caused by the Empire Wind projects will cause **permanent** ecological harm that can have “population-level changes” as to species in this region, what NMFS calls “anticipated permanent impacts to complex and soft bottom habitats,...”. NMFS, Appendix at 16.

171. Alteration in the “function of the local ecosystem” caused by changes in “feeding habitats” may arise because of injury to the seabed that “can affect the tight trophic link between the benthos and many fish species.” NMFS, Appendix at 16, citing Mavraki et al. (2020). NMFS notes that such changes may arise to the “zooplankton and phytoplankton” and may affect “the species that feed on them.” NMFS, Appendix at 16, citing Daewel et al. (2022); Maar et al. (2009).

172. NMFS also states that studies are needed to evaluate BOEM’s conclusion the hydrodynamic effects of the project “are [not] likely to be biologically significant.” NMFS, Appendix at 16 at 19.

173. NMFS states that *at the present time this cannot be established* and that “Project specific studies are needed to understand the oceanographic changes from project operation and evaluate the effects of those changes on the ecosystem and the species that rely on this area.” NMFS, Appendix at 19.

174. Other significant forms of harm are projected and discussed in the NMFS Assessment, incorporated by reference herein. See NMFS Assessment with Appendix, July 27, 2023, annexed hereto.

175. NMFS’s ecological concerns support the Presidential Memorandum and the April 16, 2025 stop work order and no evidence has been identified by the Secretary to now support the reinstatement of the Empire Wind work permits, rendering that order arbitrary, capricious or unreasonable or unsupported by this detailed and well-established ecological record.

**NMFS RECOMMENDED THAT THE EMPIRE WIND LEASE AREA BE
RECONFIGURED TO AVOID HARM**

176. NMFS actually recommended prior to the lease sale for the Empire project area that BOEM “re-evaluating the lease area” and “eliminating areas of the WEA [Wind Energy

Area] that pose the greatest conflict with the fishing industry prior to issuing a lease". NMF Assessment at .3.

177. BOEM never did this. Instead, in the ROD, it directs a "compensation fund" that is yet unestablished and undescribed (*see* ROD, Appendix A at p. A-94).

178. BOEM required the compensation fund to make up for the significant adverse impacts that it acknowledged would arise to "Commercial Fisheries and For-Hire Recreational Fishing": commercial fisheries from the turbine structures and that there is no means of mitigating such losses, as the ROD states: "Major adverse impacts are anticipated to occur due to the presence of structures (e.g., through gear loss, navigational hazards, space use conflicts, potential impacts on fisheries surveys, new cable emplacement and pile-driving noise) (see Final EIS section 3.9)." *See* ROD at 41.

179. Thus, BOEM acknowledged the major harm to the fisheries and has offered no environmental or ecological solution, as has been proposed by NMFS that recommended moving WTG structures and other other changes in the Empire Wind program.

180. Such acknowledged environmental and economic harm supports the Presidential Memorandum and the April 16, 2025 stop work order that identify the need for further investigation.

181. In the May 19, 2025 "Amendment" that reinstated the work permits, BOEM does not explain how it has resolved or cured these ecological issues, rendering the May 19 2025 order arbitrary, capricious or unreasonable or unsupported by the record.

BOEM'S ROD AND FEIS DO NOT ESTABLISH PROPER INVESTIGATION OR REVIEW, THEREBY SUPPORTING THE SECRETARY'S APRIL 16, 2025 STOP WORK ORDER

182. BOEM acknowledges that the project area will overlap “critical” habitat for endangered whales including the North Atlantic Right Whale that use the project area “throughout the year”. FEIS §3.15-3-4.

183. BOEM found that other endangered whale species use the project area as part of their habitat including the Sei whale, the Fin whale and the Sperm whale, among others. *Id.*

184. BOEM concluded that t further investigation is necessary to understand the impact of the Empire Wind project on endangered whale species and other cetaceans.

185. BOEM concluded that the migration pattern of the sperm whale is “unpredictable and poorly understood”. FEIS, §3.15-5.

186. Sound impacts on whale species are poorly understood; BOEM concluded that data is known only for smaller species, such as the common dolphin, but that hearing impacts of underwater noise form turbine construction or operation on the larger whale species is unknown. FEIS, § 3.15-11.

187. The FEIS concedes that behavioral changes from sound impacts are poorly understood and “are challenging to both predict and measure, and this remains an ongoing field of study within marine mammal bioacoustics,...”. FEIS, § 3.15-17.

188. Among the risks posed by the turbine project are the risk of “acoustic masking” in which the normal communication ability of whales is blocked or interfered with by externally added sounds. The FEIS notes that it will be necessary to properly understand these issues before regulation or mitigation can be implemented:

A growing body of research is focused on the risk of masking from anthropogenic sources, the ecological significance of masking, and what anti-masking strategies may be

used by marine animals. This understanding is essential before masking can be properly incorporated into regulation or mitigation approaches (Erbe et al. 2016). As a result, most assessments only consider the overlap in frequency between the sound source and the hearing range of marine mammals.

FEIS, §3.15-17.

189. Similarly, BOEM acknowledges that “physiological stress” to whales from sound impact “is extremely difficult to measure in wild animals” and that “this is a complex subject with many interacting factors and extreme variability in response from one sound source to another and from species to species.” FEIS, §3.15-17.

190. No evidence appears that BOEM has resolved such issues or identified the impacts of the Empire Wind project on the different species that inhabit the project area.

191. BOEM admits that impacts on whale species from underwater sound intrusions are difficult to understand and the effect is ultimately not known:

The long- term effects of multiple anthropogenic underwater noise stressors on marine mammals across their large geographical range are difficult to determine and relatively unknown. The potential for these stressors to have population-level consequences likely varies by species, among individuals, across situational contexts, and by geographic and temporal scales (Southall et al. 2021b). FEIS, §3.15-19.

192. The uncertainty of these impacts combined with BOEM’s admission that certain underwater sound emissions can cause permanent marine mammal deafness (“PTS is an irreversible loss of hearing due to hair cell loss or other structural damage to auditory tissues...”; FEIS, §3.15-16), supports the Secretary’s April 16, 2025 finding that further investigation is necessary before work permits can go forward for an industrial scale project in waters inhabited by rare and endangered whale species.

193. BOEM admits in the FEIS that there is not yet sufficient research to understand the impact of turbine structure operational sound on marine mammals: “In any case, additional data are needed to fully understand the effects of size, foundation type, and drive type on the amount of sound produced during turbine operation.” FEIS, §3.15-30.

194. BOEM acknowledges in the FEIS that there has not been definitive research as to whether the operational noise of turbines will drive away and permanently displace marine mammals but that evidence does show permanent loss of species where turbines are operating:

Very few empirical studies have looked at the effect of operational wind turbine noise on wild marine mammals. Some have shown an increase in acoustic detections of marine mammals during the operational phase of wind farms (e.g., harbor seals: Russell et al. 2016; harbor porpoise: Scheidat et al. 2011), while another study showed a decrease in the abundance of porpoises 1 year after operation began in comparison with the pre-construction period (Tougaard et al. 2005). FEIS, §3.15-31.

195. As this shows, there is contrary and inconclusive scientific study as to whether the turbine operation will drive and displace away marine mammals.

196. BOEM also noted that there has been no scientific study, *none at all*, as to the effect of pile driving noise, intense explosive underwater sound associated with turbine construction, on baleen whales, the most endangered species that inhabit the project area: “there are no studies that have directly examined the behavioral response of baleen whales to pile driving,...” FEIS, §3.15-34.

197. BOEM did acknowledge that studies using atmospheric airguns have documented behavior changes in which animals leave the area and will suffer injury to their migration capacities:

However, whales exposed to the seismic survey made a slower progression southward along their migratory route compared to the control group. This was largely seen in female-calf groups, suggesting there may be differences in vulnerability to underwater sound based on life stage (Dunlop et al. 2017). FEIS, §3.15-34.

198. BOEM also acknowledges that whales exposed to the pile driving noise for any lengthy period (it does not indicate what that period will be) can suffer permanent deafness, “PTS”, a life and species-threatening condition:

Depending on the hearing sensitivity of the species, exceedance of NMFS PTS and TTS thresholds may occur on the scale of several kilometers. PTS could permanently limit an individual’s ability to locate prey, detect predators, navigate, or find mates and could therefore have long-term effects on individual fitness. FEIS, §3.15-34

199. Despite these admissions of serious physical injury to these creatures, BOEM admits, as noted above, that there are no studies as to the effect of pile driving noise on baleen whales and that the only study has used atmospheric air guns — BOEM makes no representation that the use of air guns is sufficient to represent the likely effect of the transmission of underwater explosive sounds from the pile driving and construction activities.

200. BOEM admits that the cumulative impacts of pile-driving projects cannot be evaluated due to the lack of information or study: “[U]ncertainty remains regarding the long-term cumulative acoustic impacts associated with multiple pile-driving projects that may occur over a number of years.” FEIS, Appendix D, D-5.

201. Additionally, BOEM agrees there is insufficient research on the effect of underwater noise that is transmitted through sediment on benthic invertebrates. The FEIS observed that “infaunal organisms, such as claims, worms, and amphipods, may exhibit a behavioral response to vibration effects over a larger area, but additional research is needed.” FEIS, §3.6-22.

202. This analysis as to sound impacts further supports the Secretary's April 16, 2025 conclusion that further investigation as to the impacts of the Empire Wind project are necessary, yet no further investigation as to these (or any other issues) was identified in the May 19, 2025 reinstatement order, rendering that order arbitrary, capricious or unreasonable or unsupported by the record.

203. BOEM itself, as well as cognate agencies, has recognized that even a loss of one individual can cause a species-threatening survival event to the North Atlantic Right Whale, the population of which is so small it is vulnerable to *any* mortality. <https://www.boem.gov/environment/protecting-north-atlantic-right-whales-during-offshore-wind-energy-development>; incorporated as Exhibit N.

204. NOAA, along with BOEM, has concluded that even a loss of one member of the North Atlantic Right Whale population of approximately 350 individuals will endanger its ability to survive:

The potential biological removal (PBR) level for the species, for the purposes of the MMPA, defined as the maximum number of animals that can be removed annually while allowing the stock to reach or maintain its optimal sustainable population level, is less than one (Hayes et al. 2023).

“BOEM and NOAA Fisheries North Atlantic Right Whale and Offshore Wind Strategy”, January 2024, at 17; Exhibit O herein; see also https://www.boem.gov/sites/default/files/documents/environment/BOEM_NMFS_NARW_OSW_0.pdf; accord <https://www.boem.gov/environment/protecting-north-atlantic-right-whales-during-offshore-wind-energy-development> (noting that the species is “near extinction” and that even one loss per year will compromise its ability to survive).

205. NOAA reports there are “fewer than 70 reproductively active females” alive in the world. <https://www.fisheries.noaa.gov/species/north-atlantic-right-whale>; Exhibit P herein. Even this figure is misleadingly optimistic since their lifespan has been reduced from a century to 40 years, meaning that “lifetime calving potential has been reduced from more than a dozen to perhaps just two to three calves” for each female. *See* “BOEM and NOAA Fisheries North Atlantic Right Whale and Offshore Wind Strategy” at 8; https://www.boem.gov/sites/default/files/documents/environment/BOEM_NMFS_NARW_OSW_2_1.pdf; Exhibit Q herein.

206. Due to this and other factors, “the resilience of this population [the North Atlantic Right Whale] to stressors affecting their distribution, abundance, and reproductive potential is low” and it “faces a high risk of extinction,...” *Id.*

207. As to the risk of vessel collision between whales and vessels servicing the WTGs, BOEM acknowledges the risk and admits that “Focused research on vessel strikes on toothed whales *is lacking*.” FEIS, §3.15-22 [emphasis added].

208. Although BOEM admits that such research is non-existent, it acknowledges that vessel strikes “have been preliminarily determined to be a leading cause of death for humpback whales during the current unusual mortality event (NMFS 2023b) and a primary contributor to the NARW unusual mortality event (NMFS 2023a).” FEIS, §3.15-22 [parenthetical material in original].

209. These admissions as to the absence of information as to the likely effect of continued vessel strikes on these endangered whales following construction and during 30 years of servicing the WTGs further supports the Secretary’s April 16, 2025 stop work order. No

subsequent investigation or research has been presented by the Secretary or the Director to support the May 19, 2025 reinstatement of the Empire Wind work permits.

210. BOEM also observed that the effect of WTG construction and operation may impact the food supply of the North Atlantic Right Whale.

211. This will occur from changes in the hydrodynamic pattern of water movement once the WTG structures are in place that will cause declines in the zooplankton and phytoplankton on which the North Atlantic Right Whale feeds:

[B]roadscale hydrodynamic impacts could alter zooplankton distribution and abundance (van Berkel et al. 2020). This possible effect is primarily relevant to NARWs, as their planktonic prey (calanoid copepods) are the only listed species' prey in the region whose aggregations are primarily driven by hydrodynamic processes. As aggregations of plankton, which provide a dense food source for NARWs to efficiently feed upon, are concentrated by physical and oceanographic features, increased mixing may disperse aggregations and may decrease efficient foraging opportunities. Potential effects of hydrodynamic changes in prey aggregations are specific to listed species that feed on plankton, whose movement is largely controlled by water flow, as opposed to other listed species that eat fish, cephalopods, crustaceans, and marine vegetation, which are either more stationary on the seafloor or are more able to move independent of typical ocean currents (NMFS 2021b). FEIS, §3.15-45

212. In other words, the North Atlantic Right Whale faces a looming catastrophe and an “uncertain” future from the threat to its primary food source, as BOEM readily admits, yet it identifies no means of addressing this problem, one that will be exacerbated by the presence of other turbine fields in this creature's migration and feeding corridor.

213. Despite acknowledging the looming nature of this existential threat, BOEM admits that it has no solution to the projected interference with the North Atlantic Right Whale's food supply:

There is considerable uncertainty as to how these broader ecological changes will affect marine mammals in the future and how those changes will interact with other human-caused impacts. The effect of the increased presence of structures on marine mammals

and their habitats is likely to be negative, varying by species, and its significance is unknown. FEIS, §3.15-45.

214. Marine mammals at large will face reduced food sources from these hydrodynamic effects, as the FEIS acknowledges, §3.15.43, but BOEM admits that these impacts are not “fully understood: “the potential effects on marine mammal prey species distribution, and therefore marine mammals, from changes to hydrodynamic conditions caused by the presence of offshore structures are not fully understood at this time.” FEIS, §3.15.-43.

215. As to the most endangered of these species, the North Atlantic Right Whale, BOEM reports that “it is unknown whether the population can sufficiently recover from the loss of an individual to maintain the viability of the species.” FEIS, §3.15-47.

OTHER UNCERTAIN OUTCOMES TO THE SEA ECOLOGY AND ECOSYSTEM FROM the HYDRODYNAMIC CHANGES

216. In addition, the FEIS accepts that there is a lack of scientific analysis as to the effect of the hydrodynamic changes on a feature known as the Mid-Atlantic Cold Pool, a seasonally dependent water mass that is vital to the life cycle of fish and invertebrates in the Empire Wind Lease Area and the vicinity including major commercial species such as yellow tail flounder, winter flounder and Atlantic Surfclams. FEIS, §3.13-18; see also FEIS, §3.13-3 (describing cold pool).

217. The FEIS states that the Cold Pool’s “year-to-year dynamics are yet to be fully understood.” FEIS, §3.13-18.

218. The FEIS states that “Research on the potential disruptions to the Cold Pool from offshore wind structures is ongoing (BOEM 2021a),” FEIS, §3.13-18, but identifies no

completed research to guide understanding *and* admits that there is a lack of adequate knowledge in this field:

However, there is some uncertainty if underwater structures would lead to increased mixing during summer when the stratification of the Mid-Atlantic Cold Pool is highest (Miles et al. 2021). Nonetheless, the stability of the Mid-Atlantic Cold Pool is still expected to be at risk during the spring formation and fall dissipation phases when stratification is weaker (Miles et al. 2021). FEIS, §3.13-18.

219. BOEM also acknowledges that there is a lack of sufficient information as to the impact of turbine structures on the movement and migration of fish and invertebrates: “It is too early to evaluate the effect of offshore wind structures on fish and invertebrate movements and migrations (Sparling et al. 2020)”. FEIS, §3.13-20.

220. Finally, BOEM acknowledges the “permanent” effect of such changes but states that the extent and risk is “unknown”:

Changes in Cold Pool dynamics resulting from the Proposed Action could potentially cause changes in habitat suitability and fish community structure, but the extent of these potential impacts is unknown. Any impacts from hydrodynamic disturbances would be long term, persisting as long as the WTG foundations are in place. FEIS, §3.13-28; see also FEIS, §3.6-14 (addressing same in context of benthic resources).

221. As to EMF (Electromotive Force) impacts on marine ecologies, BOEM concedes that there is insufficient research on the effect on EMF on benthic organisms, FEIS, §3.6-29,

222. As this analysis shows there is extensive uncertainty and lack of scientific conclusion as to ecological harm in multiple aspects of the marine ecology in the Empire Wind Lease Area and vicinity caused by the projected effect of hydrodynamic changes from turbine structures.

223. As such, the Secretary was correct in issuing the April 16, 2025 stop work order that more research and investigation is necessary as to the ecological impacts of the Empire Wind project and no substantiated factual basis has been offered to administratively support the May 19, 2025 reinstatement order.

THE SECRETARY’S APRIL 16, 2025 STOP WORK ORDER WAS WELL SUPPORTED BY THIS RECORD AND NO FINDING HAS BEEN MADE BY BOEM TO SUPPORT REINSTATMENT OF THE EMPIRE WIND PERMIT

224. The Secretary had a fully supported record demonstrating unresolved scientific issues in connection with ecological harm caused by the Empire Wind project that support the stop work order. No evidence of any mitigation or any effort to address these concerns has appeared to support the reinstatement of the work orders.

225. The Secretary’s April 2025 stop work order was well-supported by this evidence of uncertain outcomes and lack of developed science as to the ecological implications of the Empire Wind project and no basis in act has been offered by the Secretary to support his decision to reinstate the work permits.

226. In the Amendment to Director’s Order that reinstated the Empire Wind work permits, no reference appears as to any reason for the restoration, no “investigation” has been referenced in the Amendment, no investigation was undertaken and no factual basis appears in the Amendment to support reinstatement of the Empire Wind work permits.

WHEREFORE, plaintiffs seek declaratory relief that the May 19, 2025 “Amendment to Director’s Order of April 16, 2025” violated the APA in that no adequate factual basis has been presented to support the reinstatement of the Empire Wind work permits;

WHEREFORE, plaintiffs seek injunctive relief, and any other relief that to the Court seems just and proper, directing that the Amendment to Director's Order of April 16, 2025 be vacated and that the April 16, 2025 Director's Order be reinstated and that the BOEM Director be directed to implement and complete the investigation of the Empire Wind permit as directed in the Presidential Memorandum and by the Secretary.

Respectfully submitted,

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