

**United States Court of Appeals**  
**FOR THE DISTRICT OF COLUMBIA CIRCUIT**

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Argued September 14, 2011      Decided October 28, 2011

No. 10-1276

TOWN OF BARNSTABLE, MASSACHUSETTS  
PETITIONER

v.

FEDERAL AVIATION ADMINISTRATION,  
RESPONDENT

CAPE WIND ASSOCIATES, LLC,  
INTERVENOR

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Consolidated with 10-1307

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On Petitions for Review of an Order  
of the Federal Aviation Administration

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*W. Eric Pilsk* argued the cause for Barnstable, petitioner in No. 10-1276, and for the Alliance to Protect Nantucket Sound, petitioner in No. 10-1307. With him on the briefs were *Catherine M. van Heuven* and *Charles C. Lemley*.

*Daniel J. Lenerz*, Attorney, U.S. Department of Justice, argued the cause for respondent. With him on the brief were *Tony West*, Assistant Attorney General, *Michael Jay Singer*,

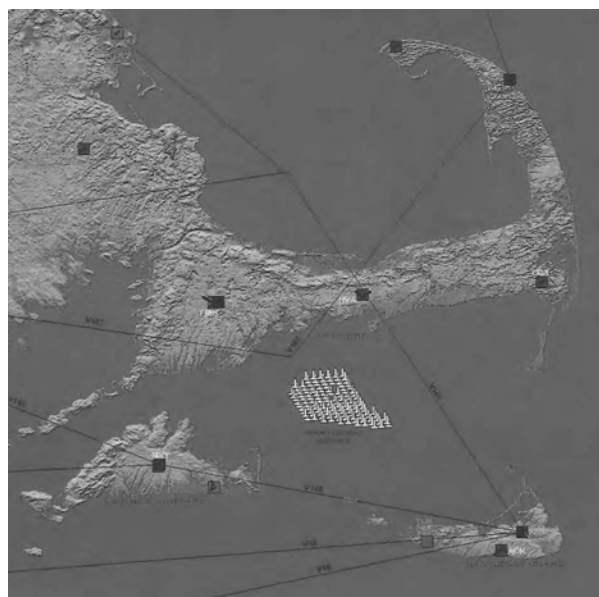
Attorney, *Richard H. Saltsman*, Assistant Chief Counsel for Litigation, Federal Aviation Administration, and *Vicki Leemon*, Manager.

*Geraldine E. Edens*, *Frederick R. Anderson*, and *Daniel G. Jarcho*, were on the brief for intervenor Cape Wind Associates, LLC.

Before: TATEL and BROWN, *Circuit Judges*, and WILLIAMS, *Senior Circuit Judge*.

Opinion for the Court filed by *Senior Circuit Judge WILLIAMS*.

WILLIAMS, *Senior Circuit Judge*: Cape Wind Associates has proposed building 130 wind turbines, each 440 feet tall, in a 25-square mile area of Nantucket Sound—an area roughly the size of Manhattan island. If constructed, the project would be the nation’s first offshore wind farm. See Impact Study of 130 Offshore Wind Turbines in Nantucket Sound at 1 fig.1, Joint Appendix (“J.A.”) 59, shown below:



As required by federal regulations, Cape Wind notified the Federal Aviation Administration of its proposed construction. See 14 C.F.R. § 77.13. After a preliminary investigation, the FAA issued a Notice of Presumed Hazard, J.A. 43, and initiated more extensive aeronautical studies to decide whether the project would “result in an obstruction of the navigable airspace or an interference with air navigation facilities and equipment or the navigable airspace.” 49 U.S.C. § 44718(b). The FAA also circulated a public notice of these studies and invited interested persons to submit comments.

The FAA ultimately issued 130 identical Determinations of No Hazard, one for each of the proposed wind turbines. In the determinations, the FAA concluded that the turbines “would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities.” See, e.g., Determination of No Hazard to Air Navigation, No. 2009-WTE-332-OE (May 17, 2010) (“Determination”) at 1, J.A. 1. Although it ultimately decided that the project was not a hazard, its decision was contingent on Cape Wind’s implementing a number of measures to mitigate the turbines’ adverse impact on nearby radar facilities. See Determination at 5–6, J.A. 5–6.

Petitioners—the town of Barnstable, Massachusetts and the Alliance to Protect Nantucket Sound, a non-profit organization of private citizens and other organizations—challenge these No Hazard determinations. They argue that the FAA violated its governing statute, misread its own regulations, and arbitrarily and capriciously failed to calculate the dangers posed to local aviation.

In response, the FAA claims that petitioners lack standing to challenge the FAA’s determinations and that their merits claims are faulty. We find that petitioners do have standing

and that the FAA did misread its regulations, leaving the challenged determinations inadequately justified.

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Petitioners bear the burden of providing, “by affidavit or other evidence,” “specific facts” sufficient to demonstrate standing; once provided, however, those facts “will be taken as true” by this Court. *Sierra Club v. EPA*, 292 F.3d 895, 899 (D.C. Cir. 2002) (quoting *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560 (1992)). At this stage, however, we must assume the petitioners will prevail on the merits, see *City of Waukesha v. EPA*, 320 F.3d 228, 235 (D.C. Cir. 2003), which means we must assume the FAA would determine the wind farm poses a hazard of the degree and kind the petitioners allege.

Of the three familiar prerequisites to Article III standing—injury, causation, and redressability—the FAA acknowledges the adequacy only of petitioners’ injury claims. These include the risk of collisions, as well as delay and inconvenience for pilots and other members of the Alliance involved in aviation over and about the proposed wind farm area, with collateral damage for Barnstable as owner and operator of the town’s municipal airport (HYA) and for members of the Alliance affected by the adverse impact on aviation. Accordingly, petitioners seek a determination from the FAA that the wind farm poses an unmitigable hazard.

But the FAA sharply asserts inadequacy as to causation and redressability. Here petitioners’ burden is to show that their injuries are fairly traceable to the challenged conduct and that any ultimate success on the merits would yield a “significant increase in the likelihood that [they] would obtain relief that directly redresses the injur[ies] suffered.” *Utah v. Evans*, 536 U.S. 452, 464 (2002); see also *Nat’l Parks*

*Conservation Ass'n v. Manson*, 414 F.3d 1, 7 (D.C. Cir. 2005) (quoting the same). Put another way, there must be a “substantial probability” that a favorable outcome would redress petitioners’ injuries. *St. John’s United Church of Christ v. FAA*, 550 F.3d 1168, 1170 (D.C. Cir. 2009).

Potentially undermining petitioners’ showing of causation and redressability is the fact that the FAA’s hazard determinations, by themselves, have “no enforceable legal effect.” *BFI Waste Sys. v. FAA*, 293 F.3d 527, 530 (D.C. Cir. 2002) (quoting *Aircraft Owners & Pilots Ass’n v. FAA*, 600 F.2d 965, 966 (D.C. Cir. 1979)). The Interior Department, as lessor of the project area to Cape Wind, is the ultimate arbiter of whether the wind farm receives government permission. See 43 U.S.C. § 1337(p) (delineating Interior’s authority to grant leases on the outer continental shelf). Thus, answering the causation and redressability questions requires us, first, to assume that the FAA will determine that the wind farm poses a hazard of the degree and kind petitioners allege, and second, to appraise the likely effects of such a finding on Interior—specifically whether it would generate a significant increase in the likelihood that Interior would exercise its authority to revoke the lease or to modify it in a way that would in whole or in part redress petitioners’ threatened injuries. See Commercial Lease of Submerged Lands for Renewal Energy Development on the Outer Continental Shelf (Oct. 6, 2010) (“Lease”), available at [http://www.boemre.gov/offshore/RenewableEnergy/PDFs/CapeWind\\_signed\\_lease.pdf](http://www.boemre.gov/offshore/RenewableEnergy/PDFs/CapeWind_signed_lease.pdf), at 3 §§ 7, 8.

We conclude that petitioners have shown the requisite likelihood. Interior repeatedly assigned the FAA a significant role in its decision-making process, mandating that Cape Wind “could not begin construction until [its] receipt of the FAA’s final determination on whether a hazard exists and [Cape Wind’s] compliance with any resulting mitigation measures.” Record of Decision, Cape Wind Energy Project,

Horseshoe Shoal, Nantucket Sound (Apr. 28, 2010) (“Record of Decision”), *available at* <http://boemre.gov/offshore/renewableenergy/PDFs/CapeWindROD.pdf>, at 24. And despite recognizing that “FAA [hazard] determinations are advisory in nature,” Interior incorporated in the lease a requirement that Cape Wind abide by *any* mitigation measures FAA might propose in its ultimate determination. *Id.* at 59. Thus the final lease with Cape Wind states that if the FAA “imposes requirements on the Lessee which supersede those in the [prior] FAA Determination [], the Lessee shall comply instead with such superseding post-lease requirements.” Lease at C-28. Interior thereby gave its blessing to the FAA to impose any future mitigation measures that the FAA might deem necessary to reduce or eliminate a hazard on Cape Wind, and to do so without any further consultation.

In a curious display of agency modesty, the FAA dismisses its influence with Interior. It emphasizes that Interior reached its decision only after years of deliberation that involved consultation with over a dozen agencies, and that Interior decided to move forward with the project only “[a]fter careful review of the project need, the various alternatives considered, the concerns expressed through years of public comment, as well as the many agency consultations that were conducted and the potential impact to Nantucket Sound and environs therein.” Record of Decision at 5.

But in fact the evidence seems to us to show that Interior would take an FAA finding of hazard very, very seriously. First, the statutory mandate under which Interior issued the lease explicitly requires it to take into account the “safety” of the activities enabled by the lease. 43 U.S.C. § 1337(p)(4). Interior acknowledges this obligation in the lease itself. Lease at 3.

And the record contains numerous contentions indicating that the wind farm might pose just such a safety risk. For example, petitioners cite evidence that the many pilots who regularly operate under visual flight rules (“VFR”) near the proposed wind farm would have a difficult time staying beneath the foggy and otherwise inclement weather that often plagues Nantucket Sound, while at the same time maintaining a safe distance from the wind turbines. During such times, there would be a “clear risk of collision with the wind turbine generators.” Submission of managers of the Barnstable, Nantucket and Martha’s Vineyard airports (May 14, 2010) at 4, J.A. 586. The “finely balanced airspace over Nantucket Sound is already one of the most congested, foggy, and dangerous airspaces on the eastern seaboard.” Submission of chairman of Barnstable airport (Mar. 17, 2009) at 3, J.A. 109. A group of air traffic controllers summed it up by saying that adding the turbines to the area would be a “disaster waiting to happen.” Submission of National Air Traffic Controllers Association (Oct. 19, 2004) at 3, J.A. 343.

Petitioners also submitted evidence that attempts to circumvent the turbines would not solve the problem. Such attempts, said the CEO and president of Island Airways after reviewing the volume of traffic and its multiple layers, would be “problematic because even horizontal diversions of only one or two miles can further compress air traffic into concentrated corridors.” Aff. of W. Scott LaForge (June 15, 2010) at 5, J.A. 857. A “horizontal diversion around a 25 square mile project would certainly lead to concentrated corridors of travel” and thereby “increase the possibility of a collision.” *Id.* Moreover, such “encroachment of established VFR routes [would] severely compromise [pilots’] ability to execute collision avoidance maneuvers in the dead center of the three airports of Nantucket Sound.” Letter from W. Scott LaForge (Apr. 14, 2009) at 2, J.A. 138.

While of course the wind farm may be one of those projects with such overwhelming policy benefits (and political support) as to trump all other considerations, even as they relate to safety, the record expresses no such proposition.

Moreover, of the many agencies that Interior consulted, it adopted prospective, automatic incorporation of mitigation measures proposed by only two—the Coast Guard and the FAA. See Lease at C-28, C-30. Interior’s deference to these two agencies, one tasked with protecting safety on the sea and the other in the air, appears to reflect a serious effort to meet its statutory obligation to ensure safety. We note, moreover, that the Coast Guard determined only that navigation at sea would be “moderately impaired.” Record of Decision at 25. The required assumption of the merits in favor of petitioners precludes our supposing that the FAA’s ultimate label will speak only of a “moderate” aviation hazard.

The FAA also argues that Interior did not wait for a final determination before approving the project. But it is hardly surprising that Interior’s decision came shortly before the FAA’s final determination. In 2001, when Cape Wind first proposed the project, the turbines had been designed to be 417 feet tall; only later did it raise them to 440 feet. The FAA had studied the impact of the original configuration and had issued a no-hazard determination. See Record of Decision at 24. Interior cited this previous study in its Record of Decision, *id.*, and likely did not expect that the 23-foot height increase would alter the FAA’s viewpoint. Despite this expectation, Interior still conditioned any start of construction on receipt of a final FAA determination. *Id.*

The facts here are rather similar to those underlying our decision in *National Parks Conservation Ass’n v. Manson*, 414 F.3d 1 (D.C. Cir. 2005), where we found that petitioners had standing to challenge a non-binding Department of



Interior opinion on the visibility impact of a project over which the State of Montana had sole and final authority. *Id.* at 6–7. The state agency there retained “discretionary authority” over whether the challenged project ultimately went forward, *id.* at 6; the only legal effect of a federal finding on visibility would have been to require the state agency to consider the federal report, and, if it disagreed, to justify its decision in writing, *id.* In fact, in an opinion we cited, the Montana Supreme Court had reversed the state agency’s earlier determination in part because it found that Montana law compelled the state agency to make its decision independently of Interior’s opinion. See *Mont. Env’tl. Info. Ctr. v. Mont. Dep’t of Env’tl. Quality*, 112 P.3d 964, 972 (Mont. 2005). Although we noted in *National Parks* that Interior’s opinion had been “virtually dispositive” of the state’s earlier decision, 414 F.3d at 6, this fact was not necessary to our standing determination as the intervening Montana Supreme Court decision had relegated Interior’s opinion to an important, but nevertheless advisory role. Yet we still found standing because a changed ruling “doubtless would significantly affect” the state decision. *Id.* at 7.

Indeed, courts have often found standing where there was no binding legal mechanism by which the challenged action might be redressed. See, e.g., *Bennett v. Spear*, 520 U.S. 154, 170 (1997) (finding standing despite noting that the ultimate decision-maker was “technically free to disregard” the challenged opinion). Given Interior’s incorporation in the lease of all past and prospective mitigation measures proposed by the FAA, its conditioning of initial construction on the final FAA decision, and its persistent attention to the safety mandate in its authorizing statute, we think it improbable that Interior would then turn around and blithely disregard a determination that the project posed a substantial danger to aviation safety that defied cure through mitigation measures. We find it “likely, as opposed to merely speculative,” that the

Interior Department would rethink the project if faced with an FAA determination that the project posed an unmitigable hazard. *Lujan*, 504 U.S. at 561.

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Petitioners make two arguments on the merits. They contend that the FAA's No Hazard determinations are arbitrary and capricious because they depart from the agency's own internal guidelines. They also argue that the FAA failed to fulfill its obligations under 49 U.S.C. § 44718(b). We need reach only the first of these arguments because we agree with petitioners that, in light of the FAA's improper application of its own handbook, the FAA did not "adequately explain its result." *Public Citizen v. FAA*, 988 F.2d 186, 197 (D.C. Cir. 1993).

According to the handbook, see Procedures for Handling Airspace Matters, FAA Order 7400.2G (Apr. 10, 2008) (hereafter "handbook"), the FAA can find a hazard if the proposed structure would have a "substantial adverse effect." *Id.* § 7-1-3(e). A "substantial adverse effect" is defined to include one that would have an "[a]dverse effect" on a "significant volume of aeronautical operations." *Id.* § 6-3-5 (defining "Substantial Adverse Effect"); see also *id.* § 6-3-4 (noting that the volume of flights is significant "if one or more aeronautical operation per day would be affected"). We will return shortly to the concept of "adverse effect."

After discussing the adverse effects the turbines would have on nearby radar facilities, the FAA's Determination addressed the impact on VFR operations, purporting to find no adverse effect on such operations. In so doing, the FAA relied solely on § 6-3-8(c)1 of the handbook, which says:

A structure would have an adverse [aeronautical] effect upon VFR air navigation if its height is greater than 500 feet above the surface at its site, and within 2 statute miles of any regularly used VFR route.

Handbook, § 6-3-8(c)1 (accurately paraphrased in Determination at 7, J.A. 7). After acknowledging that a regularly used VFR route would be affected, and correctly reciting § 6-3-8(c)1, the FAA leapt to the conclusion that the turbines would not have an adverse effect because they would not exceed the 500-foot threshold. *Id.* (“Therefore, . . . , the wind turbines . . . do not meet the criteria to have an adverse effect.”).

But under any reasonable reading of the handbook, § 6-3-8(c)1 simply identifies *one* circumstance in which a structure could have an adverse effect, potentially one among many. A different part of the handbook, § 6-3-3 (including subsections (a) through (f)), introduces the concept of “adverse effect”:

6-3-3. Determining adverse effect.

A structure is considered to have an adverse aeronautical effect if it first exceeds the obstruction standards of part 77, *and/or* is found to have physical or electromagnetic radiation effect on the operation of air navigation facilities. A proposed or existing structure, if not amended, altered, or removed, has an adverse effect if it would:

...

b. Require a VFR operation, to change its regular flight course or altitude.

§ 6-3-3 (emphasis added). It is undisputed that the project turbines would (i) have the threshold “physical or

electromagnetic radiation effect on the operation of air navigation facilities” (per the first sentence), and would (ii) “[r]equire a VFR operation, to change its regular flight course or altitude” (per the second sentence, together with § 6-3-3(b)).<sup>1</sup> See Determination at 5, 7. The FAA’s complete reliance on § 6-3-8(c)1 is therefore inconsistent not only with the language of that provision (reading into it a non-existent “only”), but with the organization of the handbook, which anticipates that structures qualifying under either segment of § 6-3-3’s first sentence are to be assessed for the harms identified in the second sentence’s subsections (a) through (f).

Improperly relying solely on § 6-3-8(c)1, the FAA failed to supply any apparent analysis of the record evidence concerning the wind farm’s potentially adverse effects on VFR operations. A study by a consulting firm, MITRE, commissioned by the FAA, charted how many flights flew through a three-dimensional zone around the project, the boundaries of which were 500 feet to the side and 1000 feet above the turbines. The study found that over the course of a 90-day period 425 VFR flights flew through the immediate vicinity of the project site and that 94.1% of these 425 were flying at an altitude of 1000 feet or less. J.A. 381, 391–92. The 425 flights would be, of course, more than four and a half times the one flight per day that § 6-3-4 sets as the threshold of significance.

Once the turbines are built, many of these flights may be forced to be rerouted or to proceed in violation of the FAA’s own regulation, 14 C.F.R. § 91.119, which requires a 500-foot

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<sup>1</sup> In assuming that elements (i) and (ii) are both necessary, we give the benefit of the doubt to the FAA, reading the “first” of § 6-3-3’s first sentence as implying that structures qualify as having adverse effects only if they satisfy the criteria of both the first sentence and the second (through one or more of its subsections).

distance between an aircraft and any structure. Further, the FAA's own weather compressibility study concluded that, during instances of inclement weather, "VFR aircraft could potentially be compressed to a lower altitude" to avoid cloud cover, such that they also would come within 500 feet of the turbines in violation of § 91.119. J.A. 469. Indeed, § 6-3-8(b)2 of the handbook says that any structure "that would interfere with a significant volume of low altitude flights by actually excluding or restricting VFR operations in a specific area would have a substantial adverse effect and may be considered a hazard to air navigation." The FAA may ultimately find the risk of these dangers to be modest, but we cannot meaningfully review any such prediction because the FAA cut the process short in reliance on a misreading of its handbook and thus, as far as we can tell, never calculated the risks in the first place.

The FAA repeatedly notes in its brief that the handbook "largely consists of criteria rather than rules to follow." Respondent's Br. at 40. We agree. Any sensible reading of the handbook, and of § 6-3-8(c)1 in particular, would indicate there is more than one way in which the wind farm can pose a hazard to VFR operations. Indeed, other sections of the handbook, especially when read in light of some of the evidence noted above, suggest that the project may very well be such a hazard. Here, by abandoning its own established procedure, see *D&F Alfonso Realty Trust v. Garvey*, 216 F.3d 1191, 1197 (D. C. Cir. 2000), the FAA catapulted over the real issues and the analytical work required by its handbook.

Whether in fact an application of the handbook's guidelines to the studies discussed above will cause the FAA to find the project a hazard, and if so, of what degree, we obviously cannot tell at this stage. But it surely is enough to trigger the standard requirement of reasoned decision-making, i.e., to require the FAA to address the issues and explain its

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conclusion. *Public Citizen*, 988 F.2d at 197. The FAA's misplaced reliance on § 6-3-8(c)1 is no substitute.

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The petitions for review are accordingly granted, and the FAA's determinations are

*Vacated and Remanded.*