

United States Court of Appeals
FOR THE DISTRICT OF COLUMBIA CIRCUIT

Argued December 3, 2021

Decided August 26, 2022

No. 21-1123

VIASAT, INC.,
APPELLANT

v.

FEDERAL COMMUNICATIONS COMMISSION,
APPELLEE

SPACE EXPLORATION HOLDINGS, LLC,
INTERVENOR

Consolidated with 21-1125, 21-1127, 21-1128

On Notices of Appeal and Petition for Review of an
Order of the Federal Communications Commission

William M. Jay argued the cause for appellants Viasat, Inc. and The Balance Group. With him on the briefs were *Colin J. Ward, David J. Zimmer, Gerard J. Cedrone, Jordan Bock, Michael F. Smith, and Stephen L. Goodman.*

Pantelis Michalopoulos argued the cause for appellant DISH Network Corporation. With him on the briefs were *Mark C. Savignac* and *William Travis West*.

Ivan L. London, Jean-Claude Andre, and Philip E. Karmel were on the brief for *amicus curiae* Professor Andy Lawrence in support of appellants.

James M. Carr and *Rachel Proctor May*, Counsel, Federal Communications Commission, argued the causes for appellee. With them on the brief were *Todd Kim*, Assistant Attorney General, U.S. Department of Justice, *Robert B. Nicholson, Robert J. Wiggers, Justin Heminger, and Allen Brabender*, Attorneys, and *Jacob M. Lewis*, Associate General Counsel, Federal Communications Commission.

Pratik A. Shah argued the cause for intervenor Space Exploration Holdings, LLC in support of appellee. With him on the brief was *Z. W. Julius Chen*.

Corbin K. Barthold and *James E. Dunstan* were on the brief for *amicus curiae* TechFreedom in support of appellee.

Before: WILKINS, KATSAS, and WALKER, *Circuit Judges*.

Opinion for the Court filed by *Circuit Judge* KATSAS.

KATSAS, *Circuit Judge*: The Federal Communications Commission approved a request by Space Exploration Holdings, LLC to fly its satellites at a lower altitude. One competitor contends that the FCC did not adequately consider the risk of signal interference, a claim we reject on the merits. Another competitor, joined by an environmental group, raises a claim under the National Environmental Policy Act. We decline to consider it because the environmental group lacks

Article III standing, and the competitor's asserted injury does not fall within the zone of interests protected by NEPA.

I

A

The Communications Act of 1934 authorizes the FCC to grant radio station licenses, including for the operation of communications satellites. 47 U.S.C. § 307(a). The Commission may modify licenses if it finds that the modification would serve the public interest, convenience, and necessity. *Id.* § 316(a)(1). The Telecommunications Act of 1996 requires the agency to facilitate the provision of broadband internet service to unserved areas. *Id.* § 1302.

To further that goal, the FCC granted Space Exploration Holdings, LLC (which goes by SpaceX) a license to provide internet service by satellite. *In re Space Exploration Holdings, LLC*, 33 FCC Rcd. 3391 (2018). Once operational, this service will reach currently unserved areas.

SpaceX uses new technology to expand its coverage area. Traditional communications satellites move in geostationary orbit, or GSO. GSO satellites orbit at the same speed as the Earth's rotation, so they appear fixed in the sky. A single GSO satellite has a continuous sight line to users within its coverage area—and thus can provide continuous service to them. SpaceX's satellites, by contrast, move at lower altitudes in a non-geostationary orbit, or NGSO. The lower altitude reduces transmission latency, making NGSO satellites better suited to provide high-speed internet service. But these satellites do not synchronize with the Earth's spin, so a single satellite cannot maintain a sight line with any given user. SpaceX solved this problem by deploying multiple satellites that move and communicate as a constellation: When one

satellite moves out of view of a user's ground antenna, it transfers the signal to the next satellite in line.

B

After receiving authorization for its satellites and launching about half of them, SpaceX requested permission to operate the constellation at a lower altitude. Given the complexity of satellite system design, the FCC seeks where possible to allow licensees “to modify the technical design of their satellites as they are being built.” *Teledesic LLC, Order and Authorization*, 14 FCC Rcd. 2261, 2264 (Int’l Bureau 1999). But technical changes can interfere with signals from other satellites, so the Commission must find that “the proposed modification does not present any significant interference problems.” *Id.* Various FCC rules govern this interference determination.

First, regulations prioritize GSO systems over NGSO systems. An NGSO system “must not cause unacceptable interference to” a GSO system. 47 C.F.R. § 25.289. More specifically, NGSO systems must operate within power limits set by the International Telecommunications Union (ITU), a United Nations agency responsible for addressing signal interference internationally. *See id.* The licensee must use ITU-approved software to show compliance with the power limits. Initially, the licensee enters its satellite data into the software and certifies the results to the FCC. 47 C.F.R. § 25.146(a); *see Update to Parts 2 and 25 Concerning Non-Geostationary, Fixed-Satellite Service Systems and Related Matters*, 32 FCC Rcd. 7809 ¶ 41 (2017) (NGSO Order). The licensee then submits the data to the ITU, which must make a “favorable” or “qualified favorable” finding before the licensee may provide service. 47 C.F.R. § 25.146(c).

The rules also address interference among NGSO systems. Priority is based on the order in which the competing systems were licensed; systems licensed later must not unduly interfere with those licensed earlier. NGSO Order, 32 FCC Rcd. 7809 ¶ 61. An NGSO licensee can modify its license without losing its priority only if the changes will not cause “significant interference” to existing services. *Teledesic*, 14 FCC Rcd. 2261 ¶ 5.

C

In 2019, the FCC’s International Bureau approved SpaceX’s request to lower roughly half the satellites in its constellation, after finding that the changes would impose no undue interference and would serve the public interest. *In re Space Exploration Holdings, LLC*, 34 FCC Rcd. 2526 (Int’l Bureau Apr. 26, 2019) (First Modification Order). Because of a backlog at the ITU, the Bureau waived the ITU-finding requirement in part: It allowed the satellites to fly at the lower altitude after SpaceX certified compliance with ITU power limits using ITU-approved software. *Id.* ¶ 28. But the Bureau still required SpaceX to submit its data to the ITU and cautioned that SpaceX would have to adjust its operations if the ITU were to make an unfavorable finding. *Id.*

In the order under review, the full Commission authorized SpaceX to lower the remainder of its constellation. *In re Space Exploration Holdings, LLC*, 36 FCC Rcd. 7995 (2021) (Second Modification Order). Again, the FCC permitted SpaceX to act upon a successful software certification. *See id.* ¶ 41. But it reiterated that SpaceX would have to bring its system into compliance if the ITU were to make an adverse finding. *Id.* ¶ 97(p).

DISH Network Corporation, one of SpaceX’s competitors, objected to the modification. DISH argued that

the proposed changes would interfere with its GSO satellite television service. Another competitor, Viasat, Inc., jointly objected with an environmental organization calling itself The Balance Group. They argued that NEPA required the FCC to prepare an environmental assessment before granting the modification. The FCC rejected both contentions. Second Modification Order, 36 FCC Rcd. 7995 ¶¶ 47, 92.

DISH, Viasat, and The Balance Group appeal the FCC's order. SpaceX has intervened to support the Commission. We have statutory jurisdiction under 47 U.S.C. § 402(b)(6).¹

II

We first consider interference issues. DISH argues that the FCC's interference determination violated the Administrative Procedure Act and the Communications Act. DISH also challenges the regulatory procedure for showing compliance with ITU power limits.

A

The APA requires us to set aside agency action that is arbitrary or capricious. 5 U.S.C. § 706(2)(A). An action is arbitrary if the agency relied on inappropriate factors, failed to consider important aspects of the problem, or ignored relevant evidence. *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983). Conversely, agency action is not arbitrary if it is "reasonable and reasonably

¹ Because we have jurisdiction over the appeals under section 402(b), we dismiss Viasat's petition for review under section 402(a). *See Sprint Nextel Corp. v. FCC*, 524 F.3d 253, 256 n.4 (D.C. Cir. 2008) (sections 402(a) and 402(b) are "mutually exclusive").

explained.” *FCC v. Prometheus Radio Project*, 141 S. Ct. 1150, 1158 (2021). DISH contends that the interference determination was arbitrary for three reasons.

DISH first argues that the FCC unreasonably refused to consider expert reports claiming that SpaceX’s proposed changes would interfere with DISH’s GSO satellites. But the reports use a different method for assessing interference than what binding regulations require.

The FCC must “adhere to its own rules and regulations.” *AT&T Corp. v. FCC*, 448 F.3d 426, 434 (D.C. Cir. 2006). Here, the governing rules require interference between GSO and NGSO systems to be assessed through the method used in the ITU-approved validation software. 47 C.F.R. § 25.146(a), (c)(2). DISH acknowledges that SpaceX’s desired changes pass muster under that approach. Nevertheless, DISH argues that its experts have a better method for calculating interference. DISH thus faults the FCC for following its own interference rules. But an agency “abuses its discretion when it arbitrarily violates its own rules, not when it follows them.” *BDPCS, Inc. v. FCC*, 351 F.3d 1177, 1184 (D.C. Cir. 2003).

DISH cites *American Radio Relay League v. FCC*, 524 F.3d 227 (D.C. Cir. 2008), to support its argument. There, we faulted the FCC for failing to consider data that undermined a regulation. *Id.* at 240–41. But we did so in reviewing the regulation itself, not its application in a later licensing proceeding. *See id.* at 236; *see also Env’t Health Trust v. FCC*, 9 F.4th 893, 903 (D.C. Cir. 2021) (same for agency decision not to initiate a rulemaking). As we have explained, “an agency need not—indeed should not—entertain a challenge to a regulation, adopted pursuant to notice and comment, in an adjudication or licensing proceeding.” *Trib.*

Co. v. FCC, 133 F.3d 61, 68 (D.C. Cir. 1998). The FCC did not err by following that “hornbook” rule of administrative law. *Id.*²

DISH argues that the FCC misapplied *Teledesic* in refusing to lower the priority of SpaceX’s NGSO license. Under *Teledesic*, the FCC generally permits NGSO licensees to modify licenses without losing priority if the changes do not cause “significant interference” to other systems and are “otherwise consistent with Commission policies.” 14 FCC Rcd. 2261 ¶ 5. DISH argues that the FCC failed to consider interference to GSO systems. But the agency expressly found that lowering SpaceX’s constellation “will not increase interference to GSO satellite systems.” Second Modification Order, 36 FCC Rcd. 7995 ¶ 47. And as explained above, it applied the correct legal standard in making that finding based on a certified compliance with ITU power limits. *Id.* ¶ 40; see 47 C.F.R. § 25.289.

Finally, DISH argues that the FCC unreasonably waived the requirement of a favorable ITU finding, thus allowing SpaceX to proceed based on software validation alone. The FCC may waive its rules “for good cause shown.” 47 C.F.R. § 1.3. Good cause exists “when particular facts would make strict compliance inconsistent with the public interest.” *AT&T Wireless Servs. v. FCC*, 270 F.3d 959, 965 (D.C. Cir. 2001). To satisfy the APA, the FCC must “clearly state in the

² As explained below, the regulations themselves permit waivers “for good cause shown.” 47 C.F.R. § 1.3. DISH does not contend that its expert reports compelled the FCC to formally waive the validation method required by section 25.146(c)(2).

record its reasons for granting the waiver.” *Keller Commc’ns v. FCC*, 130 F.3d 1073, 1076 (D.C. Cir. 1997).

The FCC met these requirements. When the International Bureau first granted the waiver, it determined that an ITU backlog would significantly delay the start of operations even though SpaceX had already certified compliance with ITU power limits using ITU-approved software. First Modification Order, 34 FCC Rcd. 2526 ¶ 28. We have held that “harm resulting from delay” can be good cause for a waiver. *Omnipoint v. FCC*, 78 F.3d 620, 631 (D.C. Cir. 1996). Here, the Bureau reasonably granted a waiver to avoid long delays in the provision of internet service to Americans who remain “totally unserved by other broadband solutions.” First Modification Order, 34 FCC Rcd. 2526 ¶ 1. And it reasonably concluded that the certification of compliance would provide some assurance of no harmful interference.

DISH faults the FCC for not justifying the waiver anew in the Second Modification Order. But, in that order, the Commission explained that allowing SpaceX to lower the remainder of its constellation “will facilitate deployment” of broadband internet and “improve service to remote and underserved areas.” 36 FCC Rcd. 7995 ¶ 13. Seeing “no reason to revoke” the previously granted waiver, *id.*, the agency extended it to the rest of SpaceX’s constellation. That decision was reasonable and reasonably explained.

DISH also challenges the waiver as discriminatory and illogical. It cites *WorldVu Satellites Ltd.*, 32 FCC Rcd. 5366 (2017), to show that the FCC has not waived the ITU-finding requirement for other licensees. But the licensee there received a waiver of a *different* rule. *Id.* ¶ 19. DISH cannot show improper discrimination by offering only an “apples-and-oranges comparison.” *Barbour v. Browner*, 181 F.3d

1342, 1347 (D.C. Cir. 1999). As for logic, DISH questions the utility of requiring SpaceX to receive a favorable ITU finding in the future, despite the possibility of harmful interference in the present. Although DISH is right that future ITU review will neither prevent nor undo any current interference, it still serves a purpose: If the ITU should make an unfavorable finding, SpaceX will have to eliminate interference going forward. Second Modification Order, 36 FCC Rcd. 7995 ¶ 97(p). In the meantime, other licensees may report any present interference through established regulatory channels. *See id.* ¶ 97(i).

B

As a fallback to its arguments about arbitrariness, DISH argues that the FCC's interference determination violated sections 303 and 316 of the Communications Act. Section 303 requires the FCC to promulgate regulations "to prevent interference between stations." 47 U.S.C. § 303. As detailed above, the Commission has done so. Section 316 permits license modifications to promote the "public interest," which is undermined by harmful interference. *See id.* § 316(a)(1). DISH's argument rests on the premise that the FCC failed to adequately address the question of harmful interference, so it fails for reasons explained above.

C

Finally, DISH raises a structural challenge to 47 C.F.R. § 25.146(c), which requires licensees to obtain a favorable ITU finding. According to DISH, this requirement violates constitutional and statutory rights to judicial review, because courts cannot review the ITU finding. Moreover, DISH continues, the regulation impermissibly delegates FCC authority to the ITU.

We lack jurisdiction to consider these arguments, which DISH failed to press before the FCC. The Communications Act bars judicial review of “questions of fact or law upon which the Commission, or designated authority within the Commission, has been afforded no opportunity to pass.” 47 U.S.C. § 405(a). Quoting a phrase from one of our cases, DISH contends that the Act’s exhaustion requirement applies only to “technical defects” in an FCC decision. *See Time Warner Entm’t v. FCC*, 144 F.3d 75, 79–81 (D.C. Cir. 1998). DISH is mistaken. In *Time Warner*, we held that section 405(a) applies with special rigor to “technical or procedural” errors; in that context, a party must “raise the precise claim before the Commission” so that the agency has an opportunity to correct any mistake. *Id.* at 81. But we did not suggest that section 405(a) applies only to technical or procedural errors. To the contrary, we explained at length that section 405(a) requires all claims to be “flagged” or “teed up” before the Commission, whether by the appellant or by some other party, before they may be pursued in court. *See id.* at 79–81; *see also Nat’l Lifeline Ass’n v. FCC*, 983 F.3d 498, 509 (D.C. Cir. 2020) (“we will not review arguments that have not first been presented to the Commission”). Here, no party teed up—with precision or otherwise—the judicial-review and delegation claims that DISH now seeks to raise.

III

We now turn to the environmental claim. Viasat and The Balance Group contend that the FCC violated NEPA by allowing SpaceX to proceed without first preparing an environmental assessment.

Before reaching the merits of this claim, we must ask whether any party has standing to raise it. For constitutional standing under Article III, a party must show it has suffered

an injury that is actual, imminent, or certainly impending. *See, e.g., Clapper v. Amnesty Int'l USA*, 568 U.S. 398, 410 (2013). On the other hand, a “speculative” possibility of future injury does not suffice. *See, e.g., id.; Lujan v. Defs. of Wildlife*, 504 U.S. 555, 583–84 (1992); *City of Los Angeles v. Lyons*, 461 U.S. 95, 109 (1983). In addition, to pursue NEPA claims under the APA, the party must show that its injury “is to interests of the sort protected by NEPA.” *Fla. Audubon Soc’y v. Bentsen*, 94 F.3d 658, 665 (D.C. Cir. 1996) (en banc); *see Bennett v. Spear*, 520 U.S. 154, 162–63 (1997) (explaining the “zone of interests” rule for APA review). The “injury that supplies constitutional standing must be the same as the injury within the requisite ‘zone of interests.’” *Mount. States Legal Found. v. Glickman*, 92 F.3d 1228, 1232 (D.C. Cir. 1996).

Because neither Viasat nor The Balance Group has met both requirements, we do not reach the merits of their claim.

A

Viasat competes against SpaceX as a provider of satellite-communications services. It asserts three distinct injuries from the approval of SpaceX’s constellation.

1

Viasat worries that SpaceX’s satellites may cause debris to collide with its own satellites. Viasat operates only a single satellite that flies close to SpaceX’s constellation, and it does not seriously contend that the probability of a direct collision is high enough to support Article III standing. Instead, Viasat posits that SpaceX’s satellites may collide with other orbiting bodies, which may cause more space debris, which may in turn collide with a Viasat satellite.

This theory of injury is much too speculative. To ground standing on the risk of future harm, a party must show both that the risk is substantial and that the challenged action substantially increases it. *Food & Water Watch, Inc. v. Vilsack*, 808 F.3d 905, 914 (D.C. Cir. 2015). Viasat posits too many unlikely contingencies to clear those hurdles. First, one of SpaceX’s satellites would have to suffer a collision. The FCC estimated this risk to be a chance between 1-in-44 and 1-in-200 over the next century, depending on the number of satellites launched and the disposal failure rate. Second Modification Order, 36 FCC Rcd. 7995 ¶ 63. Second, the collision would have to generate a debris field of its own, with particles large enough to damage another satellite. According to Viasat, only 0.5 percent of debris particles currently in orbit are large enough to cause such damage. Finally, a debris particle large enough and traceable to an impact with a SpaceX satellite would have to happen upon a collision course with Viasat’s satellite, remain undetected, and thwart satellite protocols to avoid collisions. Viasat’s standing affidavit is long on the general problem of space debris, but short on the probability that any SpaceX impact might imminently harm a Viasat satellite. Viasat’s theory of space-debris collision does not cross the line from speculative to certainly impending.

Alternatively, Viasat asserts that SpaceX’s constellation increases its own operating costs—for example, by making it more technically complex and more expensive for Viasat to launch its own satellites. Those harms are economic—and thus fall outside the zone of interests protected by NEPA. *See, e.g., Gunpowder Riverkeeper v. FERC*, 807 F.3d 267, 274 (D.C. Cir. 2015) (“The zone of interests protected by the NEPA is, as its name implies, environmental; economic

interests simply do not fall within that zone.”); *Mount. States*, 92 F.3d at 1235–36 (“NEPA’s rather sweeping list of interests ... do not include purely monetary interests, such as the competitive effect that a construction project may have on plaintiff’s commercial enterprise.”).

Viasat responds that predominating economic injuries, although themselves unprotected by NEPA, do not disqualify a party from asserting other, “environmental” injuries, *Nat’l Ass’n of Home Builders v. Army Corps of Eng’rs*, 417 F.3d 1272, 1287 (D.C. Cir. 2005), or injuries with “an environmental as well as an economic component,” *Monsanto v. Geertson Seed Farms*, 561 U.S. 139, 155 (2010). Viasat reasons that its economic injury flows from “orbital crowding”—in other words, congestion in outer space—which Viasat says is a “classic environmental concern.” Viasat Reply Br. at 22–23.

We reject this argument. To be sure, we have suggested that congestion such as “vehicular and pedestrian traffic” is an environmental harm against which NEPA is directed. *Realty Income Trust v. Eckerd*, 564 F.2d 447, 452 n.10 (D.C. Cir. 1977) (quoting *Hanly v. Mitchell*, 460 F.2d 640, 647 (2d Cir. 1972)). Individuals subjected to these nuisances may therefore sue to prevent NEPA violations. An apartment owner “in Manhattan” may object to the building of a jail “across the street.” *Hanly*, 460 F.2d at 642. And the owner of buildings “in downtown Jackson, Mississippi” may object to “the construction of a new federal office building in downtown Jackson.” *Realty Income Trust*, 564 F.2d at 452. But Article III standing is not geographically unbounded. Individuals wishing to look at elephants in the Bronx Zoo cannot complain about the treatment of elephants in Sri Lanka. *See Defs. of Wildlife*, 504 U.S. at 566. Likewise, commuters in New York City cannot complain about actions

that worsen traffic in Washington, D.C. To press a NEPA claim, an individual must be close to the wildlife that he wants to experience or the congestion that he wants to avoid. This follows from the bedrock standing principle that “the ‘injury in fact’ test requires more than an injury to a cognizable interest. It requires the party seeking review to be himself among the injured.” *Sierra Club v. Morton*, 405 U.S. 727, 734 (1972); *see also Match-E. Band of Pottawatomí Indians v. Patchak*, 567 U.S. 209, 227 (2012) (a “neighboring landowner” may challenge federal land acquisition over aesthetic and environmental concerns). We do not question that space congestion attributable to SpaceX may impose economic costs on Viasat itself. But we do not think that Viasat (or its shareholders, officers, employees, customers, suppliers, or other stakeholders) can fairly be described as having personally suffered a nuisance, aesthetic, or other environmental injury from congestion in outer space.

3

Finally, Viasat claims injury because the FCC licensed one of its competitors. That is a pure economic harm well beyond the purview of NEPA. *ANR Pipeline Co. v. FERC*, 205 F.3d 405, 408 (D.C. Cir. 2000) (“suppressing competition ... is not within the zone of interests protected by NEPA”).

B

The second party seeking to raise a NEPA claim is The Balance Group. According to its “operating officer” Joseph Sandri, the Group “exists to provide a balanced approach to solving large, systemic issues” about technology’s “impact on the human condition and the environment at large.” Sandri Decl. ¶ 3. The Group asserts standing as an organization and as an association acting on behalf of its members.

To determine organizational standing, we “conduct the same inquiry as in the case of an individual.” *Havens Realty Corp. v. Coleman*, 455 U.S. 363, 378 (1982). Thus, the Group must show that it has suffered a concrete, imminent injury from the FCC’s licensing decision. *See Defs. of Wildlife*, 504 U.S. at 560. A mere “setback to the organization’s abstract social interests” is not enough. *Havens Realty*, 455 U.S. at 378. The Group must prove that its “discrete programmatic concerns are being directly and adversely affected.” *PETA v. USDA*, 797 F.3d 1087, 1093 (D.C. Cir. 2015) (quoting *Am. Legal Found. v. FCC*, 808 F.2d 84, 92 (D.C. Cir. 1987)).

A party seeking to challenge agency action in court bears the same burden to prove standing “as that of a plaintiff moving for summary judgment.” *Ams. for Safe Access v. DEA*, 706 F.3d 438, 443 (D.C. Cir. 2013). Thus, unless standing is clear from the administrative record, the party must submit evidence to prove it. *See* D.C. Cir. R. 28(a)(7); *Sierra Club v. EPA*, 292 F.3d 895, 899 (D.C. Cir. 2002). In this context as elsewhere, “barebones” statements do not suffice. *Twin Rivers Paper Co. v. SEC*, 934 F.3d 607, 613–14 (D.C. Cir. 2019).

The Group’s affidavit is too conclusory to establish organizational standing. The Group says that the FCC’s licensing decision has forced it to “redeploy personnel and divert other resources” from research projects about terrestrial networks. Sandri Decl. ¶¶ 5–6. But which personnel and resources, and to where were they redeployed? Sandri does not say, beyond a threadbare claim that “equipment and personnel” were needed to “measure the impacts of the SpaceX system.” *Id.* ¶ 5. Sandri estimates that the Group

spent “at least \$10,000” on “activities related to” SpaceX’s constellation, but he gives no concrete sense of what the funds were spent on. *Id.* ¶ 7. These unadorned assertions do not enable us to fairly assess whether the Group has satisfied the requirements for organizational standing under *Havens Realty* and *PETA*. See *Conservation Force v. Jewell*, 733 F.3d 1200, 1207 (D.C. Cir. 2013) (“We do not insist on record evidence and affidavits to establish standing because we are misguided nitpickers, but rather because we must respect the limits of our jurisdiction.”).

Associations sometimes may assert standing on behalf of their individual members, *Hunt v. Wash. State Apple Advert. Comm’n*, 432 U.S. 333, 343 (1977), but the Group has not shown that it qualifies as a membership association.

To assert associational standing, an organization must have the “indicia of a traditional membership association.” *Sorenson Commc’ns v. FCC*, 897 F.3d 214, 225 (D.C. Cir. 2018) (quoting *Am. Legal Found.*, 808 F.2d at 90). This turns on considerations such as whether members finance the organization, guide its activities, or select its leadership. See *id.*; *Gettman v. DEA*, 290 F.3d 430, 435 (D.C. Cir. 2002). On the other hand, it is not enough for putative members simply to read a group’s publications, subscribe to its e-mail list, or follow its Facebook page. See *Sorenson Commc’ns*, 897 F.3d at 225; *Gettman*, 290 F.3d at 435. In *Gettman* and *American Legal Foundation*, we applied these criteria to deny associational standing to groups that fell on the wrong side of this line. See 290 F.3d at 435; 808 F.2d at 89–90. And in *Sorenson Communications*, we denied standing to a group whose affidavit left it “unclear” whether the group satisfied these criteria. 897 F.3d at 225.

Here, the Group has given us no insight into how it relates with its members. Two purported members submitted affidavits, but neither describes involvement in the Group beyond a bare assertion of membership. *See* Baddiley Decl. ¶ 2; Malina Decl. ¶ 2. And the Group's own affidavit, submitted by its operating officer, makes no reference to membership. Again, we are left with no basis to determine whether the requisite elements of standing have been met—an issue on which the Group bore the burden of proof.

IV

The FCC adequately explained its conclusion that the modification of SpaceX's license would not interfere with DISH's satellites, and there is no proper party to pursue the NEPA claim.

Affirmed in part and dismissed in part.