Nos. 21-1123, 21-1125

IN THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

VIASAT, INC.,

Appellant,

v.

Federal Communications Commission, Appellee.

SPACE EXPLORATION HOLDINGS, LLC,

Movant-Intervenor.

On Appeal from an Order of the Federal Communications Commission

VIASAT, INC.,

Petitioner,

v.

FEDERAL COMMUNICATIONS COMMISSION AND THE UNITED STATES OF AMERICA,

Respondents.

Space Exploration Holdings, LLC, Movant-Intervenor.

On Petition for Review of an Order of the Federal Communications Commission

FEDERAL COMMUNICATIONS COMMISSION'S OPPOSITION TO VIASAT'S MOTION FOR STAY PENDING JUDICIAL REVIEW

INTRODUCTION

The Federal Communications Commission ("FCC" or "Commission") opposes Viasat's motion to stay an FCC Order allowing Viasat's competitor, Space Exploration Holding, LLC ("SpaceX"), to safely deploy communications satellites in a manner that will expand affordable, reliable wireless broadband service in underserved and rural areas in the United States.

This Court has previously recognized the "major challenge" this country faces "to ensure that the speed, capacity, and accessibility of our wireless networks keeps pace with" the "skyrocketing" need for broadband. *Nat'l Ass'n of Broadcasters v. FCC*, 789 F.3d 165, 169 (D.C. Cir. 2015). In the order under review, the FCC concluded that granting SpaceX's request to modify its licenses to permit some of its authorized

satellites to operate at a lower orbital altitude would be in the public interest because it would help mitigate the risks posed by orbital debris while expanding broadband to underserved areas. Order and Authorization and Order on Reconsideration ¶¶ 12-13, Space Exploration Holdings LLC, FCC 21-48 (April 27, 2021) ("Order") (A011).

Viasat, a competing satellite operator, seeks to stay the Order pending appeal, because (it contends) the Commission failed to appropriately examine the environmental effects of Space X's license modification under the National Environmental Policy Act (NEPA). But as we show, the Commission closely examined and reasonably rejected Viasat's claims, and Viasat has not otherwise justified the extraordinary remedy of a stay pending appeal.

First, Viasat is unlikely to succeed on the merits. As to each category of alleged environmental impact, the Commission considered the alleged effect in detail and found insufficient evidence that SpaceX's license modification, which falls into a categorical exclusion under the Commission's NEPA rules, nevertheless "may have a significant environmental impact" that requires further review. 47 C.F.R. § 1.1307(c).

Viasat also relies on speculative assertions of primarily economic harm that do not demonstrate a likelihood that Viasat has standing, much less show irreparable injury justifying the extraordinary remedy of a stay pending appeal. A stay is also unwarranted because of the harm it would pose to SpaceX and to the public interest in advancing broadband satellite service to remote or underserved areas of the United States.

Finally, a stay is unwarranted because the Commission has no objection to Viasat's alternative request to expedite its appeal, Mot. 4, a request that, if granted, would enable a prompt review of Viasat's claims without harming the interest of third parties and of the public. The motion for stay pending appeal should therefore be denied.

BACKGROUND

A. Statutory And Regulatory Background

NEPA is a procedural statute that requires agencies to consider the environmental impact of proposed federal actions. *DOT v. Pub*. *Citizen*, 541 U.S. 752, 756-57 (2004). "For efficiency," NEPA requires agencies to identify "categories of actions that normally do not have a significant effect on the human environment" and do not require further review. 40 C.F.R. § 1501.4(a). Such "[c]ategorical exclusions are not

exemptions or waivers of NEPA review; they are simply one type of NEPA review." *United Keetoowah Band of Cherokee Indians v. FCC*, 933 F.3d 728, 735 (D.C. Cir. 2019). For non-excluded actions, the agency determines whether to prepare an "environmental assessment" for actions that may have a significant effect, or an "environmental impact statement" for actions that are likely to have a significant effect. 40 C.F.R. § 1501.3(a)(1)-(3). When a categorical exclusion applies, further review may be necessary if there exist "extraordinary circumstances" in which "a normally excluded action may have a significant effect." *Id.* § 1501.4.

The Commission's rules implementing NEPA allow an "interested person" to allege potential significant effects by submitting a petition "setting forth in detail the reasons justifying or circumstances necessitating environmental consideration in the decision-making process." 47 C.F.R. § 1.1307(c). The responsible bureau shall "consider the environmental concerns that have been raised," but will require additional review only if it "determines that the action may have a significant environmental impact." *Id*.

The Commission's rules identify specific categories of actions that require further NEPA review, and exclude the rest. 47 C.F.R. §§ 1.1306, 1.1307. Because the rules do not identify satellite licensing as an action requiring further review, it is categorically excluded.

В. The Commission's Orbital Debris Rules

Satellites can generate "orbital debris" by colliding with other objects (including debris from previous collisions), and must be disposed of safely at the end of their useful lives. Commission rules require operators seeking satellite authorizations to disclose their strategies to mitigate the risk of orbital debris, 47 C.F.R. § 25.114(d)(14)(iii), including analyzing the potential risk of collision with large debris or other satellites, id., and disclosing their disposal plans. Id. § 25.114(d)(14)(iv). Because disposal is often achieved through reentry into the Earth's atmosphere, the rules also address the human "casualty risk" that may be presented if satellites do not fully "demise" during reentry and reach the Earth's surface. *Id.*¹

¹ In 2018, the Commission initiated a "comprehensive update" of its orbital debris rules, and adopted revised rules in 2020 that have not vet taken effect. Report and Order and Further Notice of Proposed Rulemaking ¶¶ 5, 12, Mitigation of Orbital Debris in the New Space

1. Prior SpaceX Authorizations

The Order at issue concerns 2,824 satellites out of a constellation of 4,408 satellites that the Commission first authorized SpaceX to operate at an altitude of 1,100-1,300 km in 2018, subject to further review of SpaceX's orbital debris mitigation plan. A012-A013 (¶¶ 1-2).

In 2019, the Commission's International Bureau granted SpaceX's request to modify the license by lowering the orbital altitude of 1,584 satellites to 550 km. See Order and Authorization, *Space Exploration Holdings LLC*, 34 FCC Rcd 2526, 2019 WL 1915582 (IB 2019).

SpaceX's orbital debris mitigation plan explained that the satellites are capable of maneuvering to avoid collisions, and that the lower altitude helps minimize debris by ensuring satellites more quickly descend into the atmosphere and are destroyed at the end of their useful lives. *Id.*¶ 21. SpaceX also addressed the potential casualty risk resulting from portions of satellites surviving reentry by explaining that SpaceX had revised the design of all but the initial 75 satellites so that "no

Age, 35 FCC Rcd 4156 (April 24, 2020). The rules continue to require disclosure of orbital debris mitigation plans. See id. ¶¶ 34, 96, 119-20.

components of . . . the satellite will survive atmospheric re-entry, reducing casualty risk to zero." Id . \P 25.

The Bureau granted the modification with conditions including compliance with current and future orbital debris rules. Id. ¶ 22.

2. The Order Under Review

In April 2020, SpaceX applied to modify the altitude of the remaining 2,824 satellites to 540-570 km and sought approval of its updated orbital debris mitigation plan. A013 (¶ 4). In July 2020, Viasat filed a petition to deny the application, primarily on the basis that Space X's proposed modification posed an unacceptable increased risk of collision and radiofrequency interference. See Petition to Deny or Defer, IBFS File No. SAT-MOD-20200417-0037 (July 13, 2020). Six months later, Viasat asked the Commission to prepare an environmental assessment or environmental impact statement under NEPA before acting on SpaceX's application. A081.

In the Order, the Commission granted SpaceX's requested modification, finding it would "serve the public interest." A020 (\P 7), see also A020-A021 (\P 8-13 (citing 47 CFR § 25.117)). The Commission explained that the modification will "allow SpaceX to implement safety-

focused changes to the deployment of its satellite constellation to deliver broadband service throughout the United States, including to those who live in areas underserved or unserved by terrestrial systems." A012 (¶ 1). For example, the Commission cited evidence that the modification would expand broadband availability in Alaska, which suffers from a "scarcity of reliable internet service" that, even when available, is "extreme[ly] expens[ive]." A020 (¶ 9). The Commission also found that the modification would have "beneficial effects with respect to orbital debris mitigation" because "deployment to a lower altitude guarantees removal of satellites from orbit within a relatively short period of time." A021 (¶¶ 12, 13).

The Order examined issues related to "the orbital debris environment" in detail. A043 (¶ 53); see also A042-A050 (¶¶ 53-71). To meet the requirement for an updated orbital debris mitigation plan, A043 (¶ 53), SpaceX provided information regarding the maneuverability, reliability, and disposal of its satellites, including the risk that some percentage will become inoperable and present an ongoing collision risk. See A042-A050 (¶¶ 53-68). The Commission evaluated SpaceX's proposal in light of "considerations identified for

large constellations in relevant research and sources, such as the U.S. Government Orbital Debris Mitigation Standard Practices." A043 (¶ 54). The Commission approved the mitigation plan subject to "ongoing review and potential revision of license terms . . . if targets for reliable operation and disposal are not met." A044 (¶ 56).

The Commission also addressed requests by Viasat and one other party to conduct a NEPA analysis before acting on the application.

A052 (¶ 74).² The Commission noted that "it is not clear that all of the issues raised by these parties are within the scope of NEPA," and that the petitions raised "novel questions about the scope of NEPA." A053 (¶ 77). It explained that SpaceX had argued that NEPA does not apply in space. *Id.* (¶ 77 & n.306) (citing 42 U.S.C. § 4321)). But "out of an abundance of caution," the Commission assumed that NEPA applied and "consider[ed] the concerns raised in the record before us." *Id.*

Because the modification was subject to a categorical exclusion under the Commission's NEPA rules, the Commission considered "whether the filings have satisfied the requirement to provide in detail

² The second party, The Balance Group, filed a notice of appeal but did not join Viasat's stay motion. On June 14, 2021, The Balance Group filed a response in this Court in support of Viasat's stay motion.

the reasons justifying or circumstances necessitating environmental consideration in the decision-making process' and if so, whether the action may have a significant environmental impact and require preparation of an [environmental assessment]." A052 (¶ 75) (quoting 47 C.F.R. § 1.1307(c)).3

Collision Risk. The Commission rejected Viasat's request for additional review of the potential for SpaceX's satellites to cause collisions and increase orbital debris. A060 (¶ 89). The Commission explained that it reviewed these issues as part of SpaceX's orbital debris mitigation plan, and concluded that plan was "consistent with the public interest." *Id.* The Commission therefore found no "reasons justifying or circumstances necessitating" further consideration under NEPA. *Id.* (citing 47 C.F.R. § 1.1307(c)).

Reentry Casualty Risk. The Commission also rejected Viasat's call to reassess, under NEPA, the risk that some satellites may incompletely "burn up on reentry and could reach the Earth's surface."

³ In applying the framework under 47 C.F.R. § 1.1307(c), the Commission "decline[d] to reach the issue" whether Viasat must make an additional showing of "extraordinary circumstances." A053 (¶ 77 & n.308).

A057 (¶ 84). The Commission explained that it already concluded that SpaceX satellites pose a casualty risk of "roughly zero" as part of its review of SpaceX's orbital debris mitigation plan. *Id.* Although Viasat disputed that conclusion, the Commission explained that the estimate was "validated" using "a Commission-mandated analysis using software purpose-built by NASA." *Id.* It concluded that the record did "not provide a justification for further environmental review of this issue." A057 (¶ 85).

Launch Emissions. The Commission rejected Viasat's request to analyze emissions from SpaceX launches because the Federal Aviation Administration (FAA) "has prepared its own [environmental assessment] on the SpaceX launches," which concluded with a finding of no significant impact. A056 (¶ 82). The Commission explained that under its rules, "no additional consideration of potential impacts associated with those launches is required." *Id.* (¶ 82 & n.331 (citing 47 C.F.R. § 1.1311(e))).

Reentry Emissions. The Commission rejected Viasat's request to "conduct further research on the effects of alumina, along with other complex chemical compounds possibly emitted into the atmosphere

upon satellite reentry." A055 (¶ 80). The Commission noted that SpaceX had submitted evidence disputing these assertions, A055 (¶ 80 nn.327-328), including evidence that even under a "totally unrealistic worst-case scenario," where all of SpaceX's satellites re-entered the atmosphere at once, "SpaceX would still create about 0.5% the amount of alumina as the metals generated by meteorites entering the Earth's atmosphere in a given year." A394 (SpaceX April 2 Ex Parte at 5); see A055 (¶ 80 nn.327-328). The Commission found "insufficient" evidence "for [it] to determine that . . . granting the SpaceX modification application may have a significant environmental impact on the atmosphere or ozone layer." A056 (¶ 82). The Commission further concluded that arguments regarding "unknowns about other complex chemical compounds" that may be released in reentry "are too vague to warrant further consideration under section 1.1307(c) of our rules." *Id*.

Astronomy and the Night Sky. The Commission next addressed concerns that the "number of satellites in the Starlink constellation, coupled with their operating altitude will cause those satellites to have a serious impact on astronomy and stargazing." A058 (¶ 86). It explained that modifying SpaceX's license to allow a lower

USCA Case #21-1125

orbital altitude would "significantly reduce the amount of time those satellites reflect sunlight during the night, thereby lessening their impact on astronomy" – a conclusion supported by the American Astronomical Society. A058 (¶ 86). The Commission also noted that SpaceX had been "working in close collaboration with the astronomy community" to develop technologies to reduce the visibility and impact of SpaceX satellites. *Id.* It stated it would monitor those activities to ensure SpaceX "continue[s] its efforts to fulfill its commitments to the astronomy community." A059 (¶ 87). In light of the "robust record" on this issue and SpaceX's ongoing efforts to address it, the Commission concluded that "the issues raised do not justify the need for an [environmental assessment]." *Id.*

No party filed a petition seeking reconsideration of the Commission's NEPA analysis.⁴ On May 21, 2021, nearly a month after the Order was released, Viasat filed a petition for administrative stay, stating it would file a motion for stay in the D.C. Circuit if the

_

⁴ Other parties filed petitions to reconsider other aspects of the Order that are not at issue here.

Commission did not act on the petition by June 1, 2021. On June 2, 2021, Viasat filed its motion for a stay in this Court.

ARGUMENT

Viasat has not justified a need for the extraordinary remedy of a stay. As we show, Viasat has failed to demonstrate (1) a "strong showing" that it will "likely" prevail on the merits, (2) it will suffer irreparable harm without a stay, (3) a stay will not harm other parties, and (4) a stay will serve the public interest. Nken v. Holder, 556 U.S. 418, 434 (2009). The Commission found significant public interest benefits to SpaceX's proposed modification, particularly in expanding broadband service to underserved and rural areas and in mitigating orbital debris risks. And after examining Viasat's environmental objections in detail, the agency reasonably concluded that they did not warrant the preparation of a NEPA environmental assessment. Viasat's claimed injuries if a stay were not granted are speculative and insubstantial, and could be remedied if Viasat prevails on appeal. On the other hand, the grant of a stay would upend SpaceX's deployment, and harm the public interest in advancing satellite broadband services to remote and underserved areas.

I. VIASAT IS UNLIKELY TO SUCCEED ON THE MERITS

A. Viasat Is Unlikely To Have Standing To Assert Its NEPA Claims

At the outset, Viasat is unlikely to show that its "particularized" 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). Viasat is one of SpaceX's competitors, and it complains that in granting the license modification, the Commission caused it to "suffer unwarranted competitive injury." Mot. 20. But it is well settled that claims of harms to "economic interests" "simply do not fall within that zone" of environmental interests that NEPA protects. Gunpowder Riverkeeper v. FERC, 807 F.3d 267, 274 (D.C. Cir. 2015); see also ANR Pipeline Co. v. FERC, 205 F.3d 403, 408 (D.C. Cir. 2000) (interest in "suppressing") competition" from a second pipeline operator did not confer standing to bring NEPA challenge to agency's authorization to second operator). Similarly, even assuming that the presence of SpaceX satellites at lower orbits may create "a more crowded orbital environment" requiring Viasat to "expend time and resources," Mot. 19, those costs are economic, not environmental.

Viasat also contends that "failed SpaceX satellites and debris from a collision involving a Space X satellite" might "damage, disable, or destroy Viasat's satellites." Mot. 19. Even if such concerns fall within NEPA's zone of interests, Viasat still must show "demonstrably increased risk of serious environmental harm [that] actually threatens [its] particular interests." Bentsen, 94 F.3d at 667; Ctr. for Biological Diversity v. Env't Prot. Agency, 861 F.3d 174, 183 (D.C. Cir. 2017) ("[T]he Supreme Court has never freed a plaintiff alleging a procedural violation from showing . . . some reasonably increased risk of injury to its particularized interest"); cf. Pub. Citizen, Inc. v. Nat'l Highway Traffic Safety Admin., 489 F.3d 1279, 1295 (D.C. Cir. 2007) (in increased-risk-of-harm cases, standing requires a "substantially increased risk of harm").

Viasat's claims of harm identify only "one satellite at the same altitude" as SpaceX satellites, and one it "intends to launch" "in the same orbital range" as those operated by SpaceX. Mot. 19. Although Viasat claims "at least several [SpaceX] satellites will fail during the next year," Mot. 18, Viasat has not demonstrated that these failures (if they occur) present a "reasonably increased risk of injury" – as opposed

to a highly speculative risk – to the "one satellite at the same altitude" or the one it "intends to launch." *See Ctr. for Biological Diversity*, 861 F.3d at 183. The risk is all the more remote because the Commission will consider "license conditions or limitations on deployment" if SpaceX's disposal failures exceed three per year. A048 (¶ 64).

B. The Commission's NEPA Analysis Was Reasonable

Apart from its unlikely standing, Viasat has not made the requisite "strong showing" that it is likely to succeed on the merits of its appeal. *Nken*, 556 U.S. at 434. Instead, the Commission reasonably concluded that SpaceX's license modification will not result in environmental impacts that had not already been examined by the Commission or another agency, and that "may [be] significant." 47 C.F.R. § 1.1307(c).

1. Collision Risk. Viasat contends that the license modification will increase the risk of satellite collisions and orbital debris. Mot. 15-17. But the Commission addressed that risk in detail in the portions of the Order evaluating SpaceX's orbital debris plan. See A042-A050 (¶¶ 53-68). Among other things, the Commission noted, SpaceX satellites (1) "would have propulsion and would be maneuverable," (2)

satellites "that reach the end of their mission" would be moved to a lower altitude "in order to hasten atmospheric re-entry," and (3) that, even if they lost maneuverability, "atmospheric drag" would ensure that SpaceX satellites would be removed from orbit within short time frames. A042-A043 (¶ 53). The Commission considered and rejected various objections to the plan based on the contention that it did not adequately address collision risk, A044-A047 (¶¶ 56-63), and ultimately concluded that Space's X's orbital debris plan was "sufficient," especially given the Commission's intention to engage in ongoing review of its operations. A044 (¶ 56).

Given that the Commission had already examined collision and orbital debris risk in detail – and concluded that SpaceX's orbital debris mitigation plan "is consistent with the public interest" – the Commission reasonably determined that additional review was unnecessary. A060-A061 (¶ 89). It is of no matter that the Commission did not present its analysis as a formal environmental assessment under NEPA. Rather, where an agency's analysis "ensure[s] full and adequate consideration of environmental issues, then formal compliance with NEPA is not necessary, but functional compliance is sufficient."

USCA Case #21-1125 Document #1902327

Env't Def. Fund v. EPA, 489 F.2d 1247, 1257 (D.C.Cir.1973); see also Nevada v. Dep't of Energy, 457 F.3d 78, 90 (D.C. Cir. 2006) ("where the proposing agency engaged in significant environmental analysis before reaching a decision but failed to comply precisely with NEPA procedures," the court will not remand to engage in a "meaningless gesture").

2. Reentry Casualty Risk. Viasat contends that the Commission "did not consider the potential harm from satellites and satellite debris that does *not* fully burn up in the atmosphere." Mot. 12. But as the Commission observed, it had "already evaluate[d]" that risk "as part of its analysis of [SpaceX's] orbital debris mitigation plans." A057 (¶ 84). In this case, SpaceX stated that its satellites were designed to be "fully demisable upon reentry," that is, "the calculated risk of human casualty from materials reaching the Earth's surface is roughly zero." *Ibid.* And as the Commission explained, Space X had validated that assertion by performing a "Commission-mandated analysis using software purpose-built by NASA." *Ibid*. The Commission's conclusion that no further analysis was required was reasonable. Env't Def. Fund, 489 F.2d at 1257.

Viasat contends that "three unique components" of SpaceX satellites "may have a chance of reaching the Earth's surface with sufficient energy to result in human casualty." Mot. 13. But as Viasat has acknowledged, the three components at issue were from an "older design," A333, that SpaceX has since modified, see supra at 7-8, to provide for complete demisability and a risk of "roughly zero." A057 (¶ 84).

3. Launch Emissions. Viasat's contention that the Commission "did not evaluate" the impact of the rocket launches needed to deploy SpaceX's satellites on the Earth's atmosphere, Mot. 12, is likewise unsupported. On the contrary, the Order expressly discussed the "effect on the atmosphere from satellite launches." A055 (¶ 81). The Commission explained that the Federal Aviation Administration had already prepared an environmental assessment considering the effects of SpaceX launches. A056 (¶ 82). Under the Commission's rules, an environmental assessment "need not be submitted to the Commission if another agency of the Federal [g]overnment has assumed responsibility for determining whether . . . the facilities in question will have a significant effect on the quality of the human environment." 47 C.F.R.

§ 1.1311(e); see also A429 (FAA consideration of "potential" environmental impacts of issuing launch licenses to" SpaceX and finding no significant impact).

Viasat contends the FAA's analysis was deficient because it did not address ozone. Mot. 12. But where the FAA had "assumed responsibility" for evaluating the environmental effects of SpaceX's launches, and had found no significant impact, the Commission reasonably concluded it was not required to examine the issues anew. 47 C.F.R. § 1.1311(e); see also Silentman v. Fed. Power Comm'n, 566 F.2d 237, 240 (D.C. Cir. 1977) (NEPA regulations contemplate reliance on other agencies' environmental analysis).

4. Reentry Emissions. Viasat is unlikely to succeed on its claim that the re-entry of SpaceX's satellites at the end of their useful lives may have a significant impact on the environment. Mot. 10-12. Viasat contends that the reentry and disintegration of SpaceX's "constellation" might deposit millions of pounds of aluminum oxide (alumina) into the atmosphere, which could contribute to global warming and damage the ozone layer. Mot. 10. As SpaceX pointed out, even if all of their satellites burned up upon reentry at once, the total amount of alumina

deposited into the atmosphere would be "about 0.5% the amount of alumina as the metals generated by meteorites entering the Earth's atmosphere in a given year." A394; see also A055 (¶ 81 & nn.327-328). Under the circumstances, the Commission reasonably concluded that the record was "insufficient" for it to conclude that reentry emissions "may have a significant environmental impact on the atmosphere or ozone layer." A056 (\P 82).

This conclusion that possible effect of reentry emissions did not meet the threshold for significant impacts is not a decision based on "uncertainty," as Viasat erroneously claims. Mot. 11. Unlike in American Bird Conservancy v. FCC, the Commission did not demand "definitive evidence" or a showing of "scientific consensus" in a situation where there was "no real dispute" that the agency's action "may' have significant environmental impact." 516 F.3d 1027, 1033 (D.C. Cir. 2008). Rather, the Commission made the record-based determination that the "threshold" of potential significance had not been crossed. Id.; see also Am. Wild Horse Campaign v. Bernhardt, 963 F.3d 1001, 1009 (9th Cir. 2020) (an assertion of "some negative effects does not necessarily rise to the level of demonstrating a significant effect on the

environment") (cleaned up). For the same reason, the Commission properly concluded that the record regarding "unknowns about other complex chemical compounds" did not provide a sufficient basis to conclude that environmental effects "may [be] significant." A056 (¶ 82 & n.333 (quoting 47 C.F.R. § 1.1307(c))).

It cannot be the case, as Viasat claims, that "any dispute over the magnitude of [alleged environmental effects] is reason to require an [environmental assessment]." Mot. 11. Such a rule would eliminate the requirement that the Commission conduct a threshold analysis of whether the asserted effects may be "significant" before deciding whether to proceed with an environmental assessment. 47 C.F.R. § 1.1307(c). It is also inconsistent with this Court's recognition that alleged environmental harms are not significant merely because an alleged risk is "nonzero." New York v. Nuclear Regul. Comm'n, 681 F.3d 471, 482 (D.C. Cir. 2012); see also id. at 478-479 (alleged harms may be insignificant if "the combination of probability and harm is sufficiently minimal").

5. Impacts on Astronomy and the Night Sky. Lastly, Viasat contends that the deployment of Space X's satellites would cause

harmful "light pollution" altering the "night sky." Mot. 13. But the Commission reasonably concluded that the "robust record" before it on these issues did not "justify the need for an [environmental assessment]." A059 (¶ 87). The Commission explained that SpaceX had taken a number of steps to reduce its satellites' visibility – including lowering their orbital altitude – and was "working in close collaboration with the astronomy community" to make further improvements. A058 (¶ 86). The Commission also emphasized that it would "continue to monitor th[e] situation and SpaceX's efforts to achieve its commitments." A059 (¶ 87).

In considering whether to require an environmental assessment of an activity otherwise categorically excluded, NEPA's implementing regulations allow an agency to consider "circumstances that lessen the impacts or other conditions sufficient to avoid significant effects." 40 C.F.R. § 1501.4(b)(1) (2021). SpaceX's mitigation efforts, combined with the Commission's commitment to monitor them, provided a reasonable basis for the Commission to conclude that further environmental review was unnecessary. See Theodore Roosevelt Conservation P'ship v. Salazar, 616 F.3d 497, 517 (D.C. Cir. 2010) ("Allowing adaptable")

mitigation measures is a responsible decision in light of the inherent uncertainty of environmental impacts, not a violation of NEPA.").

Cabinet Mountain Wilderness v. Peterson, 685 F.2d 678, 682 (D.C. Cir. 1982) (cited at Mot. 15), is not to the contrary. Instead, that decision recognizes that mitigation measures can eliminate any need for additional review where, as here, they "permit a determination that" the post-mitigation impact "is not significant." *Id.* at 682. The Court's description of the measures in that case, which were designed to "completely compensate" for effects previously recognized as significant, *id.* at 680, did not establish a higher standard, as Viasat erroneously claims (Mot. 15).

II. VIASAT WILL NOT SUFFER IRREPARABLE HARM

This court's "standard for irreparable injury" is "high." *Mexichem Specialty Resins, Inc. v. EPA*, 787 F.3d 544, 555 (D.C. Cir. 2015). Such injury must be "both certain and great," "actual and not theoretical," "beyond remediation," and "of such imminence that there is a clear and present need for equitable relief to prevent irreparable harm." *Id.*

Even if it were to suffice for purposes of standing, Viasat's assertion that its satellites face some unquantified increase in collision

risk from SpaceX's satellites absent a stay, Mot. 19, is far too "vague[]" to satisfy the requirement that "the injury claimed is both certain and great." *Cuomo v. U.S. Nuclear Regul. Comm'n*, 772 F.2d 972, 976 (D.C. Cir. 1985). And that Viasat asserts that "at least several" SpaceX satellites are expected to fail "during the next year," Mot. 18, does not establish a *likelihood* that any of those satellites will actually collide with one of Viasat's or create orbital debris that affects Viasat's interests – it is, rather, "something merely feared as liable to occur at some indefinite time." *Wisconsin Gas Co. v. FERC*, 758 F.2d 669, 674 (D.C. Cir. 1985). And to the extent a collision "should [it] occur, cannot be repaired by mere money, the[] likelihood of occurrence is too small to meet an irreparable harm standard." *Cuomo*, 772 F.2d at 976.

Likewise, Viasat's assertions of economic harm "fail to rise beyond the speculative level." *Citizens for Resp. & Ethics in Washington v.*FEC, 904 F.3d 1014, 1019 (D.C. Cir. 2018). Viasat offers only generalized assertions that it expects increased difficulty in arranging launches and avoiding collisions. Mot. 19. Viasat has offered no "evidence" of a "specific, identifiable cost" it will incur, or evidence that absent a stay, its launch and collision-avoidance efforts will "differ

materially" from those already necessary to safely operate in an environment shared by other satellites. *Mexichem*, 787 F.3d at 556 (no injury where petitioners must "make the same investments and incur the same costs" absent the challenged action); *see Bentsen*, 94 F.3d at 668 (appellants failed to demonstrate that action would "lead to greater quantities of pesticide use and erosion than already exist"). Finally, Viasat's claims of "unwarranted competitive injury," Mot. 20-21, do not support a stay, since its competitive position could be restored were it to prevail on appeal.

III. A STAY WILL HARM THIRD PARTIES AND THE PUBLIC INTEREST

On the other hand, a stay would forestall SpaceX's commercial plans and disrupt its considerable investment in satellite services. Indeed, that would appear to be its evident purpose. And of even greater importance, a stay would harm underserved and remote communities that would benefit from SpaceX's broadband service, and would undermine the public interest in providing advanced telecommunications to hard-to-reach areas. A012, A020-A021 (¶¶ 1, 9, 12-13).

Viasat brushes aside these important countervailing public interests, and relies instead on a purported "presumption" in favor of a stay in NEPA cases. Mot. 22. But the Supreme Court has rejected the argument that courts should "presume that an injunction is the proper remedy for a NEPA violation except in unusual circumstances." *Monsanto Co. v. Geertson Seed Farms*, 561 U.S. 139, 157 (2010). Rather, "[n]o such thumb on the scales is warranted," and the Court should evaluate the motion under the "traditional four-factor test." *Id.* at 158. Because the public interest would be harmed by a stay and Viasat has not satisfied any other element of the traditional test, the motion for stay pending appeal should be denied.

CONCLUSION

The motion for stay pending appeal should be denied.

Dated: June 14, 2021 Respectfully submitted,

/s/ Rachel Proctor May

P. Michele Ellison
Acting General Counsel

Filed: 06/14/2021

Jacob M. Lewis

Associate General Counsel

Rachel Proctor May Counsel

FEDERAL COMMUNICATIONS
COMMISSION
45 L Street NE
Washington, DC 20554
(202) 418-1740
fcclitigation@fcc.gov

CERTIFICATE OF COMPLIANCE

Certificate of Compliance With Type-Volume Limitation, Typeface Requirements and Type Style Requirements

1.	P. 27	document complies with the type-volume limit of Fed. R. App. $7(d)(2)$ because, excluding the parts of the document exempted ed. R. App. P. $32(f)$:
	\boxtimes	this document contains $5,122$ words, or
		this document uses a monospaced typeface and containslines of text.
2.	App.	document complies with the typeface requirements of Fed. R. P. 32(a)(5) and the type style requirements of Fed. R. App. P. 6(6) because:
	\boxtimes	this document has been prepared in a proportionally spaced typeface using Microsoft Word for Office 365 in 14-point Century Schoolbook, or
		this document has been prepared in a monospaced spaced typeface using with
		/s/ Rachel Proctor May Rachel Proctor May Counsel for Respondent Federal Communications Commission