



September 21, 2022

BY ELECTRONIC FILING

Marlene H. Dortch
Secretary
Federal Communications Commission
45 L Street, N.E.
Washington, DC 20554

Re: *IBFS File Nos. SAT-LOA-20200526-00055 and SAT-AMD-20210818-00105*

Dear Ms. Dortch:

SpaceX has gone to extraordinary lengths to ensure that its Gen2 system is not only the most advanced constellation for delivering high-speed, low-latency broadband connectivity to American consumers, but is also the most transparent and responsible satellite system in operation. As a part of these efforts, SpaceX has collaborated extensively with the astronomy community and has designed its satellites to minimize the impact on the Earth environment. Ignoring these efforts, the Natural Resources Defense Council and the International Dark-Sky Association (collectively, “NRDC/IDA”¹) have filed a belated opposition to the Gen2 application more than two years after it was filed and many months after the pleading cycle closed,² based on arguments that the Commission has previously rejected or that SpaceX has already addressed in this record.³ Accordingly, the Commission should swiftly reject NRDC/IDA’s untimely arguments and expeditiously grant the Gen2 application.

As an initial matter, NRDC/IDA, like Viasat before them, offer no substantive response to SpaceX’s well documented argument that NEPA does not apply to activities in space.⁴ Instead, they seek to goad the Commission into exceeding its authority under NEPA by interpreting the term “environment” to include “the space environment” and making unsubstantiated claims about the impact of satellites on ground activities. In doing so, they ignore the Council of Environmental Quality (“CEQ”)—the federal agency tasked with interpreting NEPA—which has established by

¹ Based on the timing and the substance of the letter, NRDC/IDA appear to be coordinating efforts with Viasat. It would be remarkable for Viasat—after having the same arguments rejected by the Commission and then being told by the United States Court of Appeals for the D.C. Circuit that it had no standing to assert these arguments in any event—to recruit NRDC/IDA as stalking horses to do their bidding, in its latest attempt to weaponize NEPA to harm a U.S.-licensed competitor.

² The Commission’s rules direct that in contesting an application for a station license, “objections based on environmental considerations shall be filed electronically as petitions to deny.” 47 C.F.R. § 1.1313(a). Petitions to deny the Gen2 application were due on or before February 8, 2022. *See Satellite Policy Branch Information, Actions Taken*, Public Notice, DA 22-43 (IB rel. Jan. 14, 2022). Accordingly, NRDC/IDA’s untimely objections may only be considered as informal comments. *See* 47 C.F.R. § 1.1313(b).

³ *See* Letter from Sharon Buccino & Ruskin Hartley to Marlene H. Dortch, IBFS File Nos. SAT-LOA-20200526-00055 and SAT-AMD-20210818-00105 (Sept. 7, 2022) (“NRDC/IDA Letter”).

⁴ *See* Consolidated Opposition to Petitions and Response to Comments of Space Exploration Holdings, LLC, IBFS File Nos. SAT-LOA-20200526-00055 and SAT-AMD-20210818-00105, at 46-47 (Feb. 24, 2022) (“Consolidated Response”).

rule that NEPA *does not apply* to “agency activities or decisions with effects located entirely outside of the jurisdiction of the United States,”⁵ such as space, which under the binding Outer Space Treaty “is not subject to national appropriation by claim of sovereignty.”⁶ Indeed, NRDC/IDA fail to cite a single statutory provision, judicial decision, agency rule, or policy statement to support their claim that NEPA applies to activities in space. Nor could they, because such materials do not exist. And without clear congressional authorization, the Commission may not unilaterally extend NEPA to space activities.⁷

Even ignoring this overarching barrier to their opposition—that NEPA does not apply to activities in space—NRDC/IDA fail to provide any new evidence of “extraordinary circumstances” necessary to overcome the Commission’s categorical exclusion of satellite-licensing activities from case-specific environmental review,⁸ or evidence of a “significant environmental impact” sufficient to mandate preparation of an environmental review. Here too, their letter merely warms over stale conjecture from Viasat that the Commission already rejected on the merits in the *SpaceX Modification Order*,⁹ and that SpaceX fully debunked in its Consolidated Response in this proceeding and subsequent advocacy.¹⁰ Worse, NRDC/IDA entirely ignore the extensive efforts that SpaceX has taken to mitigate the reflectivity of its satellites, as detailed at length in this proceeding.¹¹ Instead, the letter cites only Viasat’s demonstrably false claim that SpaceX has not acted to mitigate the reflectivity of its satellites.¹² To the contrary, leading voices in the astronomy community have called SpaceX “a role model for other companies’ developing constellations”¹³ whose work “sets a moral high ground for other operators to follow.”¹⁴ Unfortunately, for all of their emphasis on the importance of independent analysis, NRDC/IDA seem to have unquestioningly and exclusively relied on Viasat’s false statements. As it did in the *SpaceX Modification Order*, the Commission should refuse to be similarly misled.

The Commission must also reject NRDC/IDA’s demand to wastefully duplicate the Federal Aviation Administration’s (“FAA”) environmental reviews of SpaceX’s launch and recovery activities.¹⁵ The Commission unambiguously explained in the *SpaceX Modification Order* that pursuant to its rules, when the FAA has conducted its own Environmental Assessment, “no

⁵ 40 C.F.R. § 1508.1(q)(1)(i).

⁶ Treaty on Principles Governing Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies art. II, Jan. 27, 1967, 18 U.S.T. 2410 (“Outer Space Treaty”), <https://www.unoosa.org/oosa/en/ourwork/spacelaw/treaties/outerspacetreaty.html>.

⁷ See *West Virginia v. EPA*, 142 S. Ct. 2587, 2608 (2022).

⁸ See Consolidated Response at 47-50 (discussing structure of NEPA).

⁹ See Space Exploration Holdings, LLC, 36 FCC Rcd. 7995, ¶¶ 72-92 (2021) (“*SpaceX Modification Order*”).

¹⁰ See Consolidated Response at 50-58.

¹¹ See, e.g., Letter from Jameson Dempsey to Marlene H. Dortch, IBFS File Nos. SAT-LOA-20200526-00055 and SAT-AMD-20210818-00105 (Aug. 1, 2022) (discussing efforts to reduce satellite reflectivity).

¹² See NRDC/IDA Letter at 11 (citing Petition to Deny or Hold in Abeyance of Viasat, Inc., IBFS File Nos. SAT-LOA-20200526-00055 and SAT-AMD-20210818-00105, at 67 (Feb. 8, 2022)).

¹³ Jeff Foust, *SpaceX vs. the world*, SpaceNews (Dec. 18, 2021), <https://spacenews.com/spacex-vs-the-world/>.

¹⁴ Shannon Hall, *SpaceX Plans Sunshades to Save Night Skies from Starlink Satellites*, N.Y. Times (May 6, 2020) (quoting Dr. Anthony Tyson, chief scientist of the Rubin Observatory), <https://www.nytimes.com/2020/05/06/science/spacex-starlink-astronomy.html>.

¹⁵ See NRDC/IDA Letter at 8.

additional consideration of potential impacts associated with those launches is required.”¹⁶ The Commission’s determination is consistent with the FAA’s companion rule, under which that agency does not review “payloads” that are subject to regulation by the Commission or the Department of Commerce or are owned or operated by the U.S. Government.¹⁷ To do otherwise would undermine decades of federal rules and best practices, miring agencies in environmental reviews outside the scope of their expertise and potentially undermining expert agency action where two agencies reach different conclusions.

Unfortunately, while NRDC/IDA focus their arguments on SpaceX’s Gen2 proceeding, their aims extend much further. Specifically, the letter demands that the Commission “look before launch” for all satellite systems and conduct a Programmatic Environmental Impact Statement “analyzing the potential consequences of the proposed operations of *all commercial satellite operators before authorizing satellite deployment.*”¹⁸ This dangerous suggestion—which is not based in law, rule, or scientific fact—would directly undermine American innovation, global competitiveness, and fundamental broadband policy, denying millions of real people speedy access to high-speed, low-latency satellite broadband while hobbling or dooming U.S.-licensed satellite companies. The Commission must reject NRDC/IDA’s request to abandon American space leadership and broadband policy in service of baseless claims. If NRDC/IDA believe that NEPA should apply to space and that such a wide-ranging review is necessary, they should take up those ideas with Congress, which is the proper venue to address such major questions of “deep economic and political significance” that extend beyond existing law and find no clear delegation in the statutory text.¹⁹

The timing of NRDC/IDA’s opposition is curious at best, coming years after SpaceX filed its application and as the proceeding is drawing to a close. Indeed, over their combined eighty-plus years of advocacy, neither NRDC nor IDA has ever raised a NEPA challenge to satellite activities in space, including for pending satellite constellations like Viasat’s, which would operate at an altitude that is “particularly damaging” to astronomy.²⁰ Nor has NRDC or IDA challenged those, like Viasat, who have failed to provide any information in their pending applications about the environmental effect of their operations or evidence that it has made any of the efforts necessary to reduce the brightness of its own proposed constellation.²¹ Further, despite claimed expertise over the issues they have raised, including thirty years of work on ozone protection,

¹⁶ See SpaceX Modification Order ¶ 82.

¹⁷ See 14 C.F.R. § 450.43(b).

¹⁸ NRDC/IDA Letter at 2, 12 (emphasis added).

¹⁹ See *West Virginia v. EPA*, 142 S. Ct. at 2626 (Gorsuch, J., concurring) (quoting *King v. Burwell*, 576 U.S. 473, 486 (2015)).

²⁰ See e.g., C. Walker et al., *Impact of Satellite Constellations on Optical Astronomy and Recommendations Toward Mitigation*, AAS 3-5 (2020), <https://aas.org/sites/default/files/2020-08/SATCON1-Report.pdf> (“The key difference between lower (~600 km) and higher (~1200 km) orbits is the visibility in the dark of night between astronomical twilights . . .”). Ironically, Viasat’s own proposed constellation shows gross disregard for the astronomy community, as Viasat proposes to operate at such a “particularly damaging” altitude. As SpaceX noted in its Consolidated Response, Viasat has failed to provide any information about the environmental effect of its operations or provide evidence that it has made *any efforts whatsoever* to reduce the brightness of its own proposed constellation. See Consolidated Response at 55.

²¹ See Consolidated Response at 55.

NRDC/IDA fail to present any new scientific evidence in their letter, relying almost entirely on the same sources Viasat cited in its most recent attempts to misuse NEPA to slow down a U.S. competitor. Because NRDC/IDA have filed well outside the comment period and failed to meet their burden by relying almost exclusively on previously raised and rejected arguments, the Commission should promptly reject their opposition.

The Gen2 system is now poised to bring high-speed, low-latency next-generation satellite broadband to American consumers and businesses, helping to close the digital divide, address the homework gap, and drive economic growth in all parts of the country, including areas—such as in polar regions—that for too long have lacked adequate connectivity or competition. And yet, every day the Commission leaves this proceeding open provides another opportunity for SpaceX's competitors and those they have misled to heave misinformation into the record in service of anti-competitive ends. The Commission must send a clear message that these tactics will not be tolerated by stating once and for all what is already well understood: NEPA does not apply to activities in space.

SpaceX urges the Commission to reject the NRDC/IDA opposition and grant the Gen2 application expeditiously.

Sincerely,

/s/ Jameson Dempsey

Jameson Dempsey
Principal, Satellite Policy

SPACE EXPLORATION TECHNOLOGIES CORP.
1 Rocket Road
Hawthorne, CA 90250
Email: Jameson.Dempsey@spacex.com
Phone: +1 (310) 682-9836