

BRIEF FOR APPELLEE/RESPONDENTS

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

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No. 02-1194 *ET AL.*  
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NORTHPOINT TECHNOLOGY, LTD., *ET AL.*,

Appellants/Petitioners,

v.

FEDERAL COMMUNICATIONS COMMISSION  
AND UNITED STATES OF AMERICA,

Appellee/Respondents.

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ON PETITIONS FOR REVIEW AND NOTICES OF APPEAL OF  
ORDERS OF THE FEDERAL COMMUNICATIONS COMMISSION  
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## **GLOSSARY**

C/I Ratio	Carrier/Interference Ratio. As used here, the ratio between a DBS signal and an MVDDS signal. When the C/I ratio falls below a certain point, DBS service becomes unavailable.
DBS	Direct Broadcast Satellite service. A multichannel video distribution service that uses radio signals sent by satellite directly to receiving antennas located at the viewer's home.
EPFD	Equivalent Power Flux Density. The amount of signal power from a transmitter that is actually detected by a receiving antenna. Differs from PFD in that it takes into account the receive characteristics of the antenna as well as shielding.
MVDDS	Multichannel Video and Data Distribution Service. A new service authorized by the FCC to provide terrestrial video and data service by sharing spectrum resources with existing DBS service.
NGSO-FSS	Non-geostationary Fixed Satellite Service. A satellite service that uses satellites in non-geostationary orbits.
PFD	Power Flux Density. A measure of ambient radiofrequency energy at a receive antenna site.
QEF	Quasi-Error Free. A standard for determining when a DBS signal is "unavailable" to viewers. The QEF standard is one error per hour that the DBS decoder cannot correct.
RLBSA	Rural Local Broadcast Signal Act, Pub. L. No. 106-113.

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ON PETITIONS FOR REVIEW AND NOTICES OF APPEAL OF  
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BRIEF FOR APPELLEE/RESPONDENTS

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**JURISDICTION**

This Court has jurisdiction over licensing decisions under 47 U.S.C. § 402(b)(1), and over rulemaking orders under 28 U.S.C. § 2342(1).<sup>1</sup> We will refer to the parties as petitioners.

**QUESTIONS PRESENTED**

The Commission authorized a new terrestrial wireless communications service, MVDDS, that will share spectrum with an existing satellite service, DBS. The questions presented are:

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<sup>1</sup> The United States is a respondent only under § 2342 and is not a party with respect to licensing issues.

1) Whether the Commission violated the Rural Local Broadcast Signal Act, Pub. L. No. 106-113, which requires the FCC to “ensure that no facility ... causes harmful interference to” DBS service.

2) Whether the decision to allow spectrum sharing was arbitrary and capricious.

3) Whether Northpoint has standing to challenge the Commission’s assignment of MVDDS licenses.

4) Whether the Commission’s decision to assign MVDDS licenses by auction, rather than giving the licenses to Northpoint free of charge, violated:

a) The ORBIT Act, 47 U.S.C. § 765f, which prohibits auctions of spectrum “used for the provision of international or global satellite communications services;”

b) The LOCAL TV Act, 47 U.S.C. § 1110(b), which requires certain testing of technology for non-interference before the Commission may issue licenses.

5) Whether the Commission unlawfully treated MVDDS applicants, including Northpoint, differently from those for other services.

### **STATUTES AND REGULATIONS**

All pertinent materials are set forth in the briefs for petitioners.

### **COUNTERSTATEMENT OF THE CASE**

As wireless communication services have proliferated, the demand for spectrum has increased. Mindful of the “policy of the United States to encourage the provision of new technologies and services to the public,” 47 U.S.C. § 157, and of Congress’s directive that the FCC promote “efficient and intensive use of the electromagnetic spectrum,” 47 U.S.C. § 309(j)(3)(D), the FCC has sought ways to enable spectrum sharing. In this case, the FCC let two new services share spectrum already used on a primary basis by providers of geostationary

satellite services, including direct broadcast satellite service (DBS).<sup>2</sup> The two new services are non-geostationary fixed satellite service (NGSO-FSS) and terrestrial multichannel video distribution and data service (MVDDS), a service that is expected to compete with DBS. The Commission's spectrum-sharing decision is challenged from both sides: the incumbent users, the "satellite petitioners," claim that MVDDS will disrupt their DBS service; Northpoint, which applied for an MVDDS license, supports the decision to authorize MVDDS, but believes that the agency should have granted it a license free of charge rather than holding an auction.

1. This proceeding began in July 1997, when SkyBridge, L.L.C. petitioned the FCC to permit NGSO-FSS systems to operate in a number of different spectrum bands between 10.7 GHz and 17.8 GHz.<sup>3</sup> See *Notice of Proposed Rulemaking*, 14 FCC Rcd 1131, 1134 ¶2 (1998) ("*NGSO Notice*"). Those bands were already licensed on a primary basis to other satellite services, see *id.* at 1139-1140 (tables), including DBS service, which uses spectrum between 12.2 and 12.7 GHz (the "12 GHz band").

Earlier that year, an international administrative body known as WRC-97 had, after several years of technical analysis and international negotiation, adopted parameters under which NGSO-FSS users could share, on a co-primary basis with incumbent satellite users, the spectrum bands sought by SkyBridge. Specifically, WRC-97 had developed limits on a co-user's "power flux density" (PFD), which is "a measure of the amount of energy emitted by a transmitter that is present over a unit area at the Earth's surface." *NGSO Notice* ¶¶4-7. PFD is roughly analogous

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<sup>2</sup> "Primary" status in a spectrum band means that the user is entitled to protection from interference caused by "secondary" users and are permitted to cause interference to those users.

<sup>3</sup> "GHz" stands for gigahertz, or one billion cycles per second, a measure of frequency that marks particular places along the electromagnetic spectrum.

to the parts-per-million of a gas in the atmosphere; it measures how much radiofrequency energy is present at a given point. Radio reception differs from atmospheric dispersal of gasses, however, in that antennas can be designed to be especially sensitive to signals radiating from a particular direction, and correspondingly less sensitive to other signals. That effect is called the antenna's "gain." Satellite receive antennas have a high gain in the direction of the satellite. Because of that directional sensitivity, another entity can use the same spectrum at the same time without harmful interference as long as the additional signal radiates from a direction different from the satellite and its PFD does not exceed a set limit (which can be derived from engineering principles).

Almost a year later, Northpoint filed a similar petition asking the Commission to allow terrestrial usage of satellite spectrum, but, unlike SkyBridge's petition, only in the 12 GHz band. Northpoint proposed spectrum sharing for terrestrial use that worked on the same general principle as NGSO-FSS spectrum sharing. *See* Northpoint Petition for Rulemaking at 4-5 (JA 590-591). The Commission decided to address both petitions in the same proceeding "[b]ecause Northpoint is requesting that its terrestrial services be permitted to operate in some of the same spectrum requested by SkyBridge." *NGSO Notice* ¶8.

About the time it filed its petition for rulemaking, SkyBridge submitted an application for a spectrum license in the same bands that were the subject of its petition for rulemaking. Shortly before it issued the *NGSO Notice*, the Commission issued a public notice in which it accepted the application for filing and solicited (and established a cut-off date for) competing NGSO-FSS applications. *Cut-off Notice*, 1998 WL 758449 (JA 603). NGSO-FSS applications are being processed separately and are not before the Court. On the NGSO-FSS cut off date, Northpoint submitted an application for terrestrial (as opposed to satellite) usage of the 12 GHz band.

Northpoint sought waivers of numerous Commission rules that otherwise would have precluded grant of the application. *First Report and Order and Further NPRM*, 16 FCC Rcd 4096, 4215 ¶318 (2000) (“*First Order*”) (JA 288). The Commission did not accept Northpoint’s application for filing or establish a cut-off date for competing terrestrial applications.

2. In the *First Order*, the Commission determined to permit NGSO-FSS and MVDDS systems to share spectrum with existing licensees. Petitioners do not challenge the decision to license NGSO-FSS systems. With respect to MVDDS, the Commission “conclude[d] that MVDDS can operate in the 12.2-12.7 GHz band under the existing primary allocation.” The Commission found that it could “develop operating requirements for MVDDS that will ensure that DBS operations are not seriously degraded or subject to repeated interruptions due to MVDDS operations, thus avoiding any harmful interference to DBS.” *Id.* ¶213 (JA 190).

The Commission based that conclusion on several factors. First, the nature of MVDDS interference with DBS digital signals is unlike interference with analog television signals, where the picture and sound quality deteriorate gradually as interference increases. A DBS picture “retains its quality until the desired to undesired signal ratio decreases to a level too low for the receiver demodulator to decode, at which point the picture is completely lost.” *First Order* ¶205 (JA 187). Thus, interference does not seriously disrupt a viewer’s picture until the ratio between the DBS signal and the MVDDS signal, which is known as the “carrier/interference” or “C/I” ratio, falls below a certain critical point.

Second, the Commission found that appropriate operating parameters could ensure that any interference remained imperceptible to viewers. DBS signals are faded by rain, so DBS systems routinely experience some degree of rain-related unavailability. The amount of rain varies by region and by season, and system unavailability varies accordingly, sometimes by large

amounts. For example, the signal from the DirecTV satellite is disrupted by rain an average 54.7 minutes per year in Denver, whereas in Houston it is disrupted by rain an average 1144 minutes per year. *See First Order Appendix J (JA 293)*.<sup>4</sup> MVDDS signals affect DBS service only when the DBS signal has already been compromised by rain. “During a period of significant rain, the presence of interference from a terrestrial fixed service could advance the onset of picture loss and could cause the duration of this picture loss to last longer than experienced from rain alone.” *Id.* ¶205 (JA 187). Limiting the PFD of an MVDDS signal would reduce outages to a level that, given the amount of variability already present in DBS reception, “[would] be a value such that the increase would generally be unnoticed by the DBS subscriber.” *Id.* ¶213 (JA 190).

Third, both Northpoint and several DBS providers had conducted tests to detect MVDDS interference. The Commission reviewed the testing data and found “no reported DBS outages attributable to the tests.” *First Order* ¶215 (JA 191). The agency’s engineering staff also “thoroughly analyzed” the experimental reports and technical filings made by the parties and determined that interference “can be avoided through engineering techniques and regulatory safeguards.” *Ibid.*

In the *First Order* and subsequent orders in this proceeding, the Commission found that MVDDS would fulfill a number of statutory and policy goals. As a matter of spectrum efficiency, “[t]he use of innovative spectrum sharing techniques will facilitate a high level of frequency reuse.” *First Order* ¶168 (JA 174). The Commission explained that “current trends in

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<sup>4</sup> There are three orbits used by DBS providers, located at 101°, 110°, and 119° west longitude, that provide coverage to the entire continental United States. Two other orbits, at 61.5° and 148° west longitude, known as the “wing” satellites, provide only partial coverage and “are used for specialized programming or are not currently used at all.” *Second Order* ¶82 (JA 336). Each satellite has its own unavailability factor with respect to each place in the country.

spectrum usage require us to consider more complicated and creative sharing arrangements.” *Id.* ¶224 (JA 195). With respect to service to customers, MVDDS had the potential to “provide a variety of broadband services to a vast number of customers.” *Id.* ¶168 (JA 174). For example, “the inability to receive local signals from DBS operators has often been cited by consumers as negatively affecting their decision as to whether to subscribe to DBS. . . . MVDDS is well suited to provide local television station signals to satellite television subscribers.” *Memorandum Opinion and Order and Second Report and Order*, 17 FCC Rcd 9614 ¶23 (2002) (*Second Order*) (JA 312-313). Such outcomes would fulfill Congress’s directive in 47 U.S.C. § 157 that the FCC “encourage the provision of new technologies and services to the public.” They could also “ignite competition to cable and other multichannel video program distributors.” *First Order* n.358 (JA 173). The Commission concluded, in short, that “the public interest would be served by allowing MVDDS operations in this band.” *Id.* ¶167 (JA 174).

3a. Because DBS service often does not carry the signals of local broadcast stations, particularly in rural areas, Congress in 1999 enacted the Rural Local Broadcast Signal Act (RLBSA), Pub. L. No. 106-113. The statute directed the Commission within one year to “make a determination regarding licenses or other authorizations for facilities that will utilize, for delivering local broadcast television station signals to satellite television subscribers in unserved and underserved local television markets, spectrum otherwise allocated to commercial use.” *Id.* § 2002(a). It further directed the agency to “ensure that no facility licensed or authorized under subsection (a) causes harmful interference to the primary users of that spectrum.” RLBSA § 2002(b)(2). The Commission found in the *First Order* that MVDDS could bring local broadcast signals to rural markets, thus meeting “the deadline for action set forth” in RLBSA. *First Order* ¶18 (JA 121-122). The Commission found in the *Second Order* that MVDDS could

be implemented so that it would not cause harmful interference with DBS service. Specifically, the protective measures adopted elsewhere in the *Second Order* “will limit the interference potential from MVDDS to a level that does not rise to ‘harmful interference.’” *Second Order* ¶19 (JA 311); *see id.* ¶26 (“any interference caused to DBS would not likely approach a level that could be considered harmful interference”) (JA 314).

Shortly after the *First Order*, Congress enacted 47 U.S.C. § 1110 (also known as § 1012 of the LOCAL TV Act), which required the independent testing of “any terrestrial service technology proposed by any entity that has filed an application to provide terrestrial service” in the 12 GHz band in order to ensure that such service will not cause harmful interference with DBS. Pursuant to that directive, the Commission engaged MITRE Corporation to test Northpoint’s hardware (pursuant to a license agreement between Northpoint and the FCC) and analyze the potential for MVDDS interference with DBS. MITRE’s 206-page report contains a detailed technical analysis. In essence, it concluded that although MVDDS “poses a significant interference threat to DBS,” “spectrum sharing between DBS and MVDDS services in the 12.2-12.7 GHz band is feasible,” because “a wide variety of mitigation techniques exists, that ... can greatly reduce, or eliminate ... MVDDS interference impact upon DBS.” MITRE Report at xvi-xvii, xxi (JA 958-959, 963).

b. In the *Second Order*, the Commission denied reconsideration of its decision to allow MVDDS to share the 12 GHz band and adopted technical and service rules. But the bulk of the order is devoted to developing technical parameters that enable MVDDS to operate without causing harmful interference to DBS. Those parameters are not challenged here, but we will describe them because of their centrality to the case. The analysis began with the establishment of a benchmark level of acceptable interference. The Commission found that DBS is a very

reliable service, with availability rates (the percentage of time the DBS signal contains few or no data errors) “on the order of 99.8 to 99.9 percent.” *Second Order* ¶67 (JA 327). The agency wanted to “strike the appropriate balance between protecting DBS customers from interference ... and not unduly constraining the deployment of MVDDS.” *Id.* ¶68 (JA 328).

The Commission struck that balance by establishing a target of a 10% increase in current DBS unavailability levels. Thus, if a DBS system has an availability rate of 99.8% – *i.e.*, the signal contains errors 0.2% of the time – a 10% increase would cause the unavailability percentage to rise to 0.22%, which results in availability of 99.78%. The Commission reasoned that such a change “represents an insubstantial amount of increased unavailability and does not approach a level that could be considered harmful interference.” *Second Order* ¶72 (JA 330). It noted that “[u]navailability fluctuations of this degree (and higher) are commonplace,” due to seasonal and yearly variations in rainfall, “and are well tolerated by DBS subscribers in light of the overall dependability of the service.” *Id.* ¶67 (JA 327).

The 10% target was not a hard-and-fast limit – the Commission found that “[i]t would be very difficult to measure compliance [with] a percentage increase ... with sufficient accuracy to enforce such a regulation,” *Second Order* ¶70 & n.165 (JA 329) – but a benchmark on which to base the remainder of the technical analysis. Accordingly, the Commission employed a mathematical/engineering model to translate the 10% target into a PFD limit. The model is set forth in full in Appendix F to the *Second Order* (JA 431-448). Although petitioners do not challenge the model, we will describe it briefly. First, it estimates the average amount of rain-based DBS outage at a particular location for a particular satellite. It then calculates the C/I ratio that would produce a 10% increase in the existing level of unavailability. The C/I ratio is in turn converted into a PFD figure – *i.e.*, the power density of the MVDDS signal that would cause the

target outage, which is then converted into an equivalent PFD figure (EPFD). “EPFD is a measure of the amount of signal power from a terrestrial transmitter that is detected by the DBS receiver and thus, [is] capable of causing interference.” *Second Order* ¶69 (JA 329). The EPFD differs from the PFD in that it takes into account the receiving characteristics of the antenna – DBS antennas have a high gain in the direction of the satellite – as well as any shielding or other factors that cause the antenna to receive less than the ambient level of radiofrequency energy.

The EPFD model makes two important assumptions that cause it to overestimate interference to DBS signals from both rain and MVDDS. First, it assumes that “unavailability” or “outage” in service occurs when the C/I ratio falls below a level that results in “quasi-error free” (QEF) performance. *Second Order* ¶80 (JA 334). The DBS decoder can correct many errors in the signal, but not all of them. *Id.* n.190 (JA 334). QEF represents a rate of one uncorrectable error per hour, which is “the level of performance [that DBS operators] guarantee to their customers.” *Ibid.* At that performance level, the signal “appears essentially error-free to the DBS customer;” any technical degradation in a viewer’s picture would be “essentially imperceptible.” *Ibid.* The MITRE report indicates that picture quality does not deteriorate until the error rate exceeds four per minute. MITRE Report at 3-13 Table 3-4 (JA 976). The model deems the DBS signal to be “unavailable” well before any disruption of a viewer’s picture.

Of the four unavailability thresholds before the agency, QEF is the most protective of DBS; the Commission rejected less stringent thresholds. MITRE suggested a threshold of between 1 and 4 uncorrectable errors per minute. WRC-97 had used a threshold less protective than QEF in resolving NGSO-FSS interference. Northpoint suggested using the “freeze frame” threshold – when a viewer’s picture freezes on the screen. The Commission chose QEF in order

to “identify a level of interference from MVDDS that would be essentially imperceptible to a DBS customer.” *Second Order* ¶80 (JA 334).

Second, the model assumes that the DBS signal will be attenuated by rain, but the MVDDS signal will not be. *Second Order App. F at 9745* (JA 432). In reality, “the DBS signal and the terrestrial system will both be attenuated due to rain. Thus, less DBS outage will occur than predicted by this model.” *Ibid.* By making those two assumptions, the model assumed the “worst case impact on DBS signal quality.” *Ibid.*

The agency’s engineers next employed the conversion model to determine the EPFDs that would result in an average predicted unavailability increase of 10% in four geographic areas of the country. The methodology is set forth in Appendix G to the *Second Order* (JA 449-461), and petitioners do not challenge it here. The Commission selected cities in the 32 top television markets in the country, a sample “that accounts for the differences in satellite signal strength and climate patterns that occur across the country,” *App. G at 9766* (JA 453), and were thus “representative of the U.S. as a whole,” *Second Order* ¶83 (JA 337). Using the conversion model, the Commission calculated the EPFD that would yield a 10% increase in predicted unavailability for each city, for each of the three principal DBS satellites, and it graphed those three data points for each city, along with the three-satellite average EPFD for each city. The graph revealed “distinct groupings [of cities] where the average and calculated EPFD levels do not vary substantially.” *App. G at 9768* (JA 455). From those groupings, the Commission determined that there were four geographic regions that experienced similar levels of satellite outage: Eastern, Midwestern, Southwestern, and Northwestern (figure 2 of Appendix G shows a map of the regions (JA 457)). The EPFD limit for each region was set at the average EPFD of the three satellites for that region.

The Commission then calculated the predicted outages that would result from the EPFD limit for each of the three principal satellites serving each of the 32 top-market cities. (JA 465, 466, 467). For the most part, the increased predicted outage due to MVDDS was close to 10%. (The median increase was 10.5% and the mean was 11.9%. *Second Order* ¶84 (JA 337)). With respect to the satellite located at 110° west longitude, fifteen of the cities were predicted to experience increased outages of more than 15%, six of them 20 to 30% (JA 466). Given the worst-case assumptions in the model, which overstates the magnitude of the actual expected outages, the Commission found that “even a 20-30% increase in predicted unavailability” for the 110° satellite “should be considered permissible.” *Second Order* n.210 (JA 338). Indeed, “seasonal and yearly precipitation conditions will cause much greater variations in the DBS service availability.” *Ibid.* “Unavailability fluctuations of [up to 100%] are commonplace ... and are well tolerated by DBS subscribers.” *Id.* ¶67 (JA 327). Even in the cities with increases greater than 20%, system availability in each city will still exceed 99.6%. The Commission also noted that the 110° satellite was scheduled to be replaced (and since has been replaced) by a “newer higher-powered satellite” that will “reduce service unavailability due to MVDDS.” *Id.* n.210 (JA 337). Moreover, the overall level of outage would continue to fall as “newer, more powerful satellites” come into service. *Id.* ¶84 (JA 338).

To protect against MVDDS signals that exceeded the EPFD limit, the Commission also established “mitigation” procedures. Due to the physical characteristics of DBS antenna reception, some DBS receivers in close proximity to an MVDDS transmitter may potentially receive exposure in excess of the EPFD limit. *Second Order* ¶55 (JA 322). The Commission required that “MVDDS licensees must ensure that the adopted EPFD is not exceeded at any DBS customer of record location,” or they must “turn off the transmitter(s) which are causing the

excessive EPFD levels.” *Second Order* ¶¶89-90 (JA 340). The Commission defined customers of record to mean “those who had their DBS receive antennas installed prior to or within the 30 day period” after an MVDDS provider notifies a DBS operator of its intent to install a transmitting antenna (the notification rules are also set forth in the order). *Id.* n.221 (JA 340). As suggested in the MITRE report, a number of techniques, such as shielding the receiving DBS antenna, are available to reduce exposure. *Id.* ¶87 (JA 339); *see* MITRE Report at xvii-xix (JA 959-961). “If a DBS provider or customer of record lodges a complaint regarding service within one year after MVDDS commences operations, the MVDDS licensees must correct interference to that customer or cease operation.” *Second Order* ¶93 (JA 342).

4. In the *Second Order*, the Commission dismissed Northpoint’s application along with several other applications for terrestrial licenses that had been submitted subsequently. The Commission found that the terrestrial applications had been filed prematurely because no filing window had been opened for terrestrial service. The dismissal was “without prejudice to refile in a subsequent window for terrestrial applications.” *Second Order* ¶214 (JA 384). The Commission also denied Northpoint’s request to waive FCC rules that prohibited its terrestrial service in the 12 GHz band. The Commission determined that Northpoint’s waiver applications did not adequately address interference concerns, which the Commission determined should be considered in its industry-wide rulemaking. *Id.* ¶¶215-228 (JA 384-389).

The Commission decided to award MVDDS licenses by auction under 47 U.S.C. § 309(j)(1). *Second Order* ¶¶237-238 (JA 391-392). It rejected Northpoint’s claim that the ORBIT Act, 47 U.S.C. § 765f, which prohibits auction of spectrum “used for the provision of international or global satellite communications services,” forbade an auction of MVDDS spectrum. The agency also rejected Northpoint’s argument that it was the only qualified

MVDDS applicant by virtue of the testing requirement of § 1012 of the LOCAL TV Act, 47 U.S.C. § 1110(b). *Second Order* ¶246 (JA 395).

The Commission denied petitions for reconsideration in the *Fourth Memorandum Opinion and Order*, 18 FCC Rcd 8428 (2003) (*Fourth Order*) (JA 517).

5. In January 2004, the Commission completed an auction of MVDDS licenses. Ten bidders won 192 licenses with winning bids totaling \$118.7 million. *MVDDS Results Notice*, 19 FCC Rcd 1834 (2004). Northpoint did not re-apply for a license or participate as a bidder in the auction.

### **SUMMARY OF ARGUMENT**

The Commission's authorization of MVDDS and its decision to auction MVDDS licenses satisfy all applicable statutes and are reasonable.

1. MVDDS will not cause harmful interference to DBS service. Satellite petitioners *concede* that small increases in DBS outages do not constitute harmful interference, but point to a few places where they say the predicted increase in outages will be significant. The Commission explained in detail why such predicted outages do not constitute harmful interference.

First, the DBS satellite located at 110°, which accounted for the majority of locations that were predicted to experience larger outages, has been replaced with a higher powered satellite subject to dramatically reduced predicted outages from MVDDS.

Second, the model by which the Commission estimated DBS outages assumes that an "outage" in service will occur when there is more than one uncorrectable error in the signal per hour – a point at which a DBS viewer will not perceive any degradation in the picture. That unavailability threshold was the most protective of DBS service; the Commission rejected less

stringent proposals. The model also assumes that in rainy conditions the DBS signal will be faded by rain, but the MVDDS will remain full strength; in reality, both signals will be degraded. That assumption causes the model to overestimate the degree of MVDDS-related outage – even under the Commission’s highly protective standard for “outage.”

Third, the satellite petitioners focus on percentage increases in predicted outages, which are misleading in this context. Because DBS service is very reliable, large percentage increases in outage levels do not indicate large increases in actual outages. A 30% increase, for example, can amount to a few ten-thousandths of the total amount of DBS availability. The Commission reasonably determined that such a minimal disruption did not demonstrate harmful interference.

Finally, the Commission predicted that consumers would be relatively insensitive to increased DBS outages. DBS subscribers are accustomed to variations, often significant (and larger than MVDDS-related increases in predicted outages), in the availability of their service due to rain levels that vary substantially from year to year and season to season. The record showed that DBS subscribership does not vary with the amount of weather-related outage, and the Commission accordingly predicted that subscribers would be similarly insensitive to MVDDS-related disruptions.

The MVDDS rules will protect both present and future DBS subscribers from harmful interference. An MVDDS transmitter may not begin to operate until the operator has ensured that no customer of record will receive signals above the EPFD limit. 47 C.F.R. § 101.1440(a). Later-acquired DBS customers will be protected by the directive that DBS antenna installers take siting and shielding measures to avoid excess exposure. 47 C.F.R. § 101.1440(e). The Commission recognized that some extremely small number of DBS subscribers might be subject

to MVDDS exposure above the EPFD limit, but overexposure cannot be treated as a proxy for *harmful* interference.

2. Northpoint lacks standing to raise its claims because its injury is not redressable. The Commission denied the rule waivers without which Northpoint's application could not be granted and it dismissed Northpoint's application for an MVDDS license. Northpoint does not challenge the waiver denial, and it did not apply for a license during the MVDDS filing window. Northpoint is not and cannot now become a valid licensee. A Northpoint victory here would secure it no redress.

On the merits, the ORBIT Act does not preclude an auction of MVDDS licenses. The statute applies only to spectrum that will be "used for" international or global satellite services. The spectrum here will be used only for terrestrial services.

The LOCAL TV Act does not require individual testing of each MVDDS applicant's hardware. The statute requires a "technical demonstration" of "technology," and the Commission correctly determined that the Act was satisfied as to all applicants by the testing of Northpoint's hardware, combined with the Commission's engineering modeling that ensured that MVDDS would not cause harmful interference. The Commission reasonably concluded that the term "technology" can mean a technical methodology rather than just hardware. Northpoint's contrary interpretation would require the agency to conduct wasteful testing of similar MVDDS hardware.

Northpoint is wrong that the LOCAL TV Act's 60-day deadline for conducting testing of "pending" applications precluded competing MVDDS applications filed after that time. Nothing in the statute suggests such a result, and Congress should not be deemed to have limited potential applicants' rights in such an oblique manner.

Northpoint's license agreement with the FCC, which allows the agency to use Northpoint's technology for testing, does not prohibit the agency from using the testing results in its consideration of other applications. The FCC expressly rejected such a condition in the license, and Northpoint agreed to the license without it.

Finally, Northpoint experienced no unlawful discrimination because it was not situated similarly to NGSO-FSS applicants. Unlike Northpoint, NGSO-FSS applicants were not required to request rule waivers before their applications could be granted. Unlike MVDDS, NGSO-FSS had been the subject of years of international proceedings to address interference protection, and the Commission did not have to create such protections from scratch. Auction of NGSO-FSS licenses is prohibited by the ORBIT Act, but auction of MVDDS licenses is permitted. The Commission properly treated the differently situated services differently.

## **ARGUMENT**

### **I. STANDARD OF REVIEW**

The FCC's interpretation of its own definition of "harmful interference" is entitled to "controlling weight unless it is plainly erroneous or inconsistent with the regulation." *MCI Worldcom Network Services, Inc. v. FCC*, 274 F.3d 542, 547 (D.C. Cir. 2001) (citations and quotation marks omitted); accord *General Elec. Co. v. EPA*, 53 F.3d 1324, 1327 (D.C. Cir. 1995). As we explain below, here, the interpretation involves the agency's engineering judgment and expertise. In those circumstances, the deference is even greater. *MCI Cellular Telephone Co. v. FCC*, 738 F.2d 1322, 1333 (D.C. Cir. 1984). The Court will uphold the FCC as long as it has supported its technical judgment "with even a modicum of reasoned analysis." *Hispanic Information & Telecommunications Network v. FCC*, 865 F.2d 1289, 1297-1298 (D.C. Cir. 1989).

The statutory questions are governed by *Chevron USA Inc. v. NRDC*, 467 U.S. 837, 842-843 (1984). Under *Chevron*, if “the intent of Congress is clear” from the language of the statute, “that is the end of the matter.” But if the statutory language does not reveal the “unambiguously expressed intent of Congress” on the “precise question” at issue, the Court must accept the agency’s interpretation as long as it is reasonable and “is not in conflict with the plain language of the statute.” *National R.R. Passenger Corp. v. Boston & Maine Corp.*, 503 U.S. 407, 417 (1992).

The administrative law issues are reviewed under the APA. The Court may reverse the agency’s determinations only if they are “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.” 5 U.S.C. § 706(2)(A). That standard is highly deferential toward the agency; the Commission need only articulate a “rational connection between the facts found and the choice made.” *Motor Vehicle Mfrs. Ass’n v. State Farm Mutual Ins. Co.*, 463 U.S. 29, 43 (1983). The Court “presume[s] the validity of the Commission’s action and will not intervene unless the Commission failed to consider relevant factors or made a manifest error in judgment.” *Consumer Electronics Ass’n v. FCC*, 347 F.3d 291, 300 (D.C. Cir. 2003).

## **II. THE SATELLITE PETITIONERS’ CLAIMS LACK MERIT.**

### **A. MVDDS Complies With RLBSA Because It Will Not Cause Harmful Interference To DBS.**

The Commission’s regulatory approach provides that, even after the development of MVDDS, DBS signals will exceed the QEF threshold more than 99.6% of the time. Nevertheless, the satellite petitioners argue that the Commission violated RLBSA by failing to specify a “definitive limit” on the amount of time MVDDS service will cause the DBS signal to

fall below that threshold. Without such a limit, they claim, some DBS customers in particular locations will experience “more than a 30% increase in unavailability.” Br. 18. Petitioners do not argue that *any* increase in unavailability constitutes harmful interference, and in failing to do so they concede that *some* degree of increased unavailability is permissible under the statute. Yet nothing in RLBSA requires the Commission to craft a “definitive limit” on the amount of permissible interference; rather, the statute only requires the FCC to avoid “harmful interference.” The real question thus is whether the FCC abused its discretion when it determined that MVDDS service will not cause harmful interference. The Commission acted well within its discretion; its determination was rational and supported by the record.

The Commission defines “interference” to mean “[t]he effect of unwanted energy ... upon reception in a radiocommunication system, manifested by any performance degradation, misinterpretation, or loss of information which could be extracted in the absence of such unwanted energy.” 47 C.F.R. § 2.1 (listing terms in alphabetical order). “Harmful interference” means interference that “seriously degrades, obstructs, or repeatedly interrupts a radiocommunication service.” *Ibid.* Interference thus exists on a continuum ranging from no interference to harmful interference, with no precise boundary between the two. Determining whether a service disruption constitutes “harmful” interference necessarily requires the agency to exercise its discretion, informed by engineering judgment and the context of a particular service. *See generally AT&T Wireless Services, Inc. v. FCC*, 365 F.3d 1095 (D.C. Cir. 2004) (discussing various interference thresholds).

Congress plainly contemplated that the Commission would exercise such judgment under RLBSA. Congress required the Commission to facilitate the delivery of local television signals to DBS subscribers in “unserved and underserved” markets, and to do so using “spectrum

otherwise allocated to commercial use.” RLBSA § 2002(a). In other words, the Commission was required to implement a spectrum sharing plan. Whenever two services use the same frequencies at the same time, however, some degree of interference is unavoidable. Thus, by also requiring the agency to ensure that the spectrum sharing called for in § 2002(a) results in no *harmful* interference to the other users of the spectrum, RLBSA § 2002(b)(2), Congress necessarily left to the Commission’s judgment the task of determining how much interference constitutes harmful interference. The legislative history of RLBSA indicates that Congress “did not mean to interfere with the expert technical and regulatory judgment of the FCC with respect to licensing applicants in the [12 GHz] band.” 145 Cong. Rec. S15014 (Nov. 19, 1999) (statement of Sen. McCain). The agency reasonably exercised its judgment here for several reasons.

First, the Commission found that the replacement of the satellite located at 110° west longitude significantly reduced the outages in nearly every city that was predicted to experience an increase in outage in the 20-30% range. *Compare Second Order* App. G at 9779 (listing outages for former satellite) (JA 466) *with Fourth Order* App. D Table 6 (same with new satellite) (JA 585). For example, the predicted MVDDS-related increase in outage from the old satellite for Boston was 30%, or 350 minutes per year; the predicted outage in Boston for the new satellite is 3.6%, or 4 minutes per year (JA 585). Other cities show comparable reductions in outages. The Commission expected that unavailability would continue to fall even more as “newer, more powerful satellites” come into service. *Second Order* ¶84 (JA 338).

Second, the “worst-case” assumptions built into the predictive model assume that “unavailability” occurs when the DBS signal falls below the QEF threshold. *Second Order* ¶80 (JA 333). At that point, although the model assumes a DBS service “outage,” the effect on a

viewer's picture is "essentially imperceptible." *Ibid.* The MITRE Report indicates that picture quality deteriorates when the error rate exceeds 4 per minute; the QEF standard is 1 error per hour. MITRE Report at 3-13 (JA 976). The predictive model also assumes that the DBS signal will be faded by rain, but the MVDDS signal will not, which means that actual outages will be less than predicted. *Second Order* ¶79 (JA 332-333) and App. F at 9745 (JA 432). The model assumes further that there will be no "natural shielding [against the MVDDS signal] by terrain, foliage and buildings." *Fourth Order* ¶56 (JA 546). Thus, the FCC's engineering models overestimate the magnitude of interference as perceived by a DBS user.

Third, the agency recognized that although the predicted increase in unavailability of up to 30% for the 110° satellite in some cities appeared large on its face, it exaggerated the actual effect on DBS service. "[W]hen availability [of a very reliable service] changes even slightly ... the correspondingly small change in unavailability ... can be expressed as a percentage change that appears deceptively large." *Second Order* ¶67 (JA 327). For example, the change from a 0.3% predicted outage level to 0.39% – a 30% increase – amounts to a difference of only *9 ten-thousandths* of the total amount of availability. From the perspective of *availability* rather than unavailability, DBS service will remain available more than 99.6% of the time (*i.e.*, 8725 out of the 8760 hours in a year) in almost every case, and well above that in most cases. Given that DBS service is unavailable for some percentage of the time due to rain alone, such small decreases in availability due to MVDDS "should not be readily perceptible to DBS customers." *Second Order* ¶79 (JA 332). Indeed, even a cumulatively significant number of hours of additional yearly outage may amount to very little time per outage, when the individual outages are spread over the course of a full year. The actual impact on consumers is lessened further because at least some of the increased outage almost certainly will occur when customers are not

watching (or recording) television. *Fourth Order* ¶56 (JA 546-547). It is also important to remember that “unavailable” refers to a picture of effectively undiminished quality and a 30% increase in that level represents a far lower degree of actual disruption to viewers.

Finally, the Commission predicted that consumers would be relatively insensitive to the increase in outage resulting from MVDDS. DBS signals are attenuated by rain, and nearly every place in the country experiences some degree of rain-related DBS predicted unavailability, some of them significant. Miami, for example, has an average 2614 minutes (43.5 hours) per year of predicted outage due to rain from the satellite at 119° west longitude (JA 467). Even Phoenix is predicted to lose a signal due to rain an average 600 minutes per year (JA 466). Furthermore, rain rates vary by season and from year-to-year: the chart set forth in note 179 of the *Second Order*, for example, shows that January rainfall in Allentown, Pennsylvania, has varied over the course of a decade from a high of more than 7 inches to a low of under 2 (JA 333). DBS subscribers are thus accustomed to variations, sometimes significant, in the availability of their service. Yet data in the record showed that DBS subscribership rates do not appear to be “sensitive to the amount of baseline outage.” *Second Order* n.160 (JA 327). A 30% increase in unavailability – “less than the seasonal, yearly, and city-to-city variability that already exists in the unavailability within the DBS service,” *id.* ¶79 (JA 332) – does not represent what customers perceive to be a significant degradation in service. “Unavailability fluctuations of this degree (and higher) are commonplace ... and are well tolerated by DBS subscribers.” *Id.* ¶67 (JA 327).

The satellite petitioners rest much of their argument on a single fact: that Seattle will experience 45 hours of additional predicted outage to service from the satellite at 61.5° west longitude. Br. 18, 23-24. Their point is presumably that such a degree of predicted outage cannot possibly fail to constitute harmful interference, but that data point does not undermine the

Commission’s conclusions. The outage in Seattle is from a “wing” satellite – *i.e.*, one that is located far to the east, the signal from which barely reaches the west coast – from which there is a baseline outage in Seattle of more than 9000 minutes (139 hours) per year from rain alone. For that reason, the Commission did not consider Seattle to be a “locatio[n] where reliable DBS service could be expected” from that satellite, and it excluded service to Seattle from the 61.5° satellite from its consideration of harmful interference. *Fourth Order* ¶57 (JA 547). It does not appear that any of the satellite petitioners use the 61.5° satellite to provide service to Seattle. *See Second Order* ¶82 (JA 335-336). The Seattle data point therefore does not demonstrate that the Commission abused its engineering discretion. Moreover, in “anomalous situations” within the specified geographic regions – for example, a sub-region that receives significantly greater rainfall – the Commission created a “safety valve procedure” through which DBS providers could ask the agency to adjust the EPFD limit for that sub-region. *Second Order* ¶83 (JA 337).<sup>5</sup>

**B. Current And Future DBS Subscribers Will Be Protected From Interference.**

The Commission’s rules provide that an MVDDS provider “shall not begin operation unless it can ensure that the EPFD from its transmitting antenna at all DBS customers of record locations” is below the applicable limit. 47 C.F.R. § 101.1440(a). The Commission defined “customers of record” as “those who had their DBS receive antennas installed prior to or within the 30-day period after notification to the DBS operator by the MVDDS licensee of the proposed MVDDS transmitting antenna site.” *Ibid.* The rules provide further that beginning 30 days after

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<sup>5</sup> In a one-paragraph argument, satellite petitioners charge the Commission with having considered “impermissible factors” by “weighing the alleged benefits from the introduction of a new terrestrial service against the costs of tolerating harmful interference to DBS users.” Br. 23. That argument is wrong because the Commission engaged in no such weighing, but determined that MVDDS would not cause harmful interference to DBS.

notification, the DBS antenna installer is responsible for ensuring that future DBS receive antennas are “located in such a way as to avoid the MVDDS signal.” 47 C.F.R. § 101.1440(e). In addition, MVDDS licensees “must satisfy all complaints of interference to DBS customers of record which are received during a one year period after commencement of operations of the transmitting facility.” 47 C.F.R. § 101.1440(g). Satellite petitioners charge that those rules violate RLBSA.

1. Petitioners claim that the rules “allo[w] MVDDS licensees to cause harmful interference to new DBS subscribers,” which is “flatly at odds with the RLBSA.” Br. 19.

That argument ignores 47 C.F.R. § 101.1440(e), which requires that DBS antenna installers ensure that future DBS receive antennas are “located in such a way as to avoid the MVDDS signal” and thus eliminate harmful interference. If the real argument is that RLBSA requires the Commission to place on the MVDDS provider the entire burden of remedying any interference, it is wrong. The statute says nothing about who must bear the burden of correcting interference. Rather, it says that the Commission “shall ensure that no facility ... causes harmful interference.” The Commission fulfilled that directive by taking reasonable steps – with the bulk of the responsibility on the MVDDS provider, but (with respect to new customers) some on the DBS provider as well – to ensure that DBS would not be subject to harmful interference. *Fourth Order* ¶32 (JA 533).

As described above, the Commission’s considerable engineering analysis set EPFD limits that ensure that MVDDS would cause no harmful interference at all to the vast majority of DBS subscribers. In the immediate vicinity of an MVDDS transmitter “a zone exists ... where it is possible that the EPFD ... may exceed the adopted limit.” *Fourth Order* ¶61 (JA 549). Any over-exposure within that “mitigation zone,” however, can be remedied by “modest measures,”

such as “siting and shielding steps or use of a larger antenna.” *Second Order* ¶92 (JA 341). In other words, where the antenna is placed can limit its exposure to MVDDS signals – beside a chimney that blocks the signal, for example, or under the eaves of a house – as can a shield that clips onto DBS antennas and blocks unwanted signals. *Id.* ¶87 (JA 339). Larger antennas, which have higher gains, experience less interference. MITRE similarly found that “a wide variety of mitigation techniques exist that ... can greatly reduce, or eliminate ... potential MVDDS interference impact upon DBS.” MITRE Report at xvii (JA 959); *id.* at xvii-xix (JA 959-961). Such mitigation measures are, the Commission found, “simple, effective, and consistent with existing DBS installation practices.” *Second Order* ¶92 (JA 341). With respect to DBS customers of record, the MVDDS provider must ensure that no such customer, wherever located, will be exposed to an EPFD above the limit. With respect to later-acquired customers, the antenna installer must take preventative measures. All customers will be protected against harmful interference. *Second R&O* ¶92 (JA 341).

The Commission expected the amount of mitigation for later-acquired customers to be “negligibly small.” *Fourth Order* ¶36 (JA 535). New subscribers will benefit from interference protection already worked out for existing ones: “if the EPFD level is met for a customer [of record], it is not unreasonable to assume that at a later date that customer's neighbors will also be able to install DBS receivers where the received EPFD level is below the limit.” *Id.* n.98 (JA 530). The Commission is entitled to a high degree of deference for such “predictive judgments,” *Melcher v. FCC*, 134 F.3d 1143, 1152 (D.C. Cir. 1998), and petitioners have given no basis to question the prediction.

Placing a small mitigation burden on the DBS provider allowed the Commission to satisfy both statutory and practical considerations. *Fourth Order* ¶32 (JA 533). RLBSA

contains two policy goals in tension with one another. The Commission viewed its task as “satisfy[ing] both of Congress’s goals,” *id.* ¶33 (JA 533), by striking the proper balance between creating a new service to fulfill the first goal of providing rural access to local broadcast television signals, and avoiding harmful interference to fulfill the second one. Furthermore, although the Commission considered requiring MVDDS providers to remedy interference at all DBS customer locations, that approach was “consistently opposed by DBS proponents,” who did not want MVDDS providers to have any contact with DBS customers. *Id.* ¶30 (JA 531); *see also* Joint Petition For Reconsideration of EchoStar and DirecTV at 22 (companies “strongly opposed” requiring DBS provider to supply to MVDDS providers addresses of customers) (JA 1053). Splitting the burden was “a reasonable compromise that respects” both the desires of the DBS providers and the needs of the MVDDS providers. *Fourth Order* ¶30 (JA 531). The Commission further pointed out that “the adoption of any sharing rules between services, where none previously existed, inevitably results in an adjustment of the relative rights or responsibilities that licensees or subscribers of pre-existing service must accommodate.” *Id.* ¶29 (JA 531); *see id.* ¶36 (burden on non-MVDDS parties is “balanced by the public interest in providing a new service”) (JA 535).

2. Similar reasoning defeats petitioners’ claim that the Commission has violated RLBSA by requiring MVDDS providers to remedy complaints of interference only for one year. Br. 20. Petitioners cite nothing in the record showing that the year of mandatory interference remediation will be inadequate to address any interference problems that arise. It surely was reasonable for the Commission to predict that any problems would become apparent in the course of an entire year. In other services, the agency limits to one year responsibility for remediation of interference. *See* 47 C.F.R. § 73.318(b) (FM blanketing interference). It was also

reasonable for the Commission to limit the protection period because of “the potential for false claim reporting against the MVDDS licensee.” *Second Order* ¶93 (JA 342). With respect to DBS customers who must relocate their dish after a year, Br. 21, there is no reason to believe – and petitioners provide none – that the same “modest measures” that antenna installers can use to protect new customers will be inadequate to protect relocated dishes.

3. Finally, satellite petitioners contend (Br. 22) that the Commission violated RLBSA because of its acknowledgement that, with respect to later-deployed DBS antennas, MVDDS signals might exceed the EPFD limit in “very infrequent circumstances within the limited extent of the predicted mitigation zone around each MVDDS transmitter.” *Fourth Order* ¶36 (JA 535).

That an MVDDS signal exceeds the EPFD limit at an antenna does not mean that the viewer using that antenna will suffer harmful interference. Due to the worst-case assumptions on which the EPFD model rests, the Commission predicted that “consumers will never see outages of the magnitude shown” by the model. *Fourth Order* ¶55 (JA 545). And, for the reasons discussed above, a degree of exposure over the EPFD limit likely would not be noticeable. Indeed, in most places, the increase in predicted outage is 10% or less, so in those places an MVDDS signal that exceeds the EPFD limit by a small amount will not cause harmful interference. Finally, in light of the “inescapable reality” that many potential DBS customers live in “locations [that] are presently, or may become, unsuitable for DBS reception due to signal blockage caused by factors such as tree growth or building construction and the like,” *id.* ¶36 (JA 535), the Commission found in effect that a small degree of additional predicted signal unavailability did not amount to harmful interference in the context of a service that is not, and can never be, available at all places. “DBS subscribers appear to accept as a norm of the DBS service that a variety of potential receiver sites might not be suitable for DBS reception.” *Ibid.*

In any event, RLBSA should not be interpreted to prohibit instances of interference that the Commission found would not “rise above a de minimis level.” *Fourth Order* ¶36 (JA 535). As described above, such instances can occur only in DBS antennas installed after an MVDDS transmitter goes into service. After that time – perhaps years later – the theoretical possibility exists that someone could deploy a DBS dish in a location that cannot be mitigated – say, directly in front of the MVDDS antenna. It would not be a sensible construction of RLBSA to outlaw MVDDS now because of that remote future possibility. Such a construction would allow the anti-interference requirement of § 2002(b)(2) to effectively nullify Congress’s directive in § 2002(a) that the Commission allow sharing of spectrum to bring service to rural areas. It is black letter law, however, that statutes should not be read to nullify other parts of the same statute. *United States v. American Trucking Assns*, 310 U.S. 534, 543 (1940); *Environmental Defense Fund v. EPA*, 82 F.3d 451, 468 (D.C. Cir. 1996) (refusing to construe a statute literally in order to avoid “futile results”).

**C. The Commission’s Understanding Of “Harmful Interference” And Its Predictive Judgment About Consumer Tolerance Were Reasonable.**

**(1) Harmful Interference.**

Petitioners charge that the Commission’s focus on consumer perceptions is arbitrary, in violation of the APA, because “consumer tolerance is not the test for harmful interference.” Br. 24. They fault the Commission for having “cite[d] no precedent to suggest” that consumer perceptions are relevant, but, ironically, they fail to cite any precedent against the Commission’s commonsense approach. *Ibid.* Given the continuum of interference described above, harmful interference could hardly be defined in any way other than its effect on the ultimate recipient of a

radio transmission.<sup>6</sup> As one of petitioners' own "chiefly relied on" cases indicates, consumer perception has been central to the determination of harmful interference for years. In *Kentown Speedway & Hobbies*, 1 FCC 2d 889 (1965), the hearing examiner determined that the interference at issue amounted to harmful interference because "the spots or specks on [the viewer's] television screen were sufficiently extensive and of such brightness as to be offensive to the ordinary television viewer." *Id.* at 894. Likewise, in *WBC Broadcasting, Inc.*, 2004 WL 575155 (2004), the Commission assessed whether there was harmful interference in part on "whether there are wide-spread complaints of interference." *Id.* at p.5.

**(2) Consumer Tolerance.**

Satellite petitioners claim that the Commission has inadequately supported its prediction of DBS customer indifference to service degradation at the level at issue here. Specifically, they argue that the Commission improperly relied on data showing that DBS subscriber rates were consistent among four states with varying satellite outages. Br. 25.

The Commission's predictions about consumer reactions are textbook "predictive judgments" about future events that the agency must make in order to craft rules governing the unknown future. When an agency must "make policy judgments where no factual certainties exist or where facts alone do not provide the answer," the Court's role is limited to "requir[ing] only that the agency so state and go on to identify the considerations it found persuasive." *Melcher*, 134 F.3d at 1152 (citations omitted). In such circumstances, "complete factual support in the record for the Commission's judgment or prediction is not possible or required; 'a forecast

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<sup>6</sup> Congress has shown a similar understanding. In § 632(b)(2)(B) of Pub. L. No. 106-553, Congress directed the FCC to conduct "independent audience listening tests to determine what is objectionable and harmful interference to the average radio listener."

of the direction in which the future public interest lies necessarily involves deductions based on the expert knowledge of the agency.” *FCC v. NCCB*, 436 U.S. 775, 814 (1978) (citations omitted). The agency amply met that standard here.

The Commission provided several reasons to support its predictive judgment that DBS subscribers would not be seriously affected by MVDDS systems operated in conformity with the Commission’s rules. In light of the “worst-case” assumptions built into the engineering model, DBS service will remain extremely reliable. *See* pages 20-21, *supra*. Moreover, from season to season and from year to year, DBS customers face wide variations in their own service that are larger than the increased outages that will be caused by MVDDS. *Second Order* ¶79 (JA 332-333). Yet DBS has been a highly successful service that keeps growing, *see Tenth Annual Video Competition Report*, 19 FCC Rcd 1606, 1650-1652 (2004) – and the Commission properly observed that “subscriber[ship] rates in areas experiencing the highest rates of unavailability are comparable to those in areas with the lowest such rates,” *Second Order* n.160 (JA 327). The Commission thus reasonably predicted that such customers would be insensitive to relatively small increases in variability. The Petruzelli Statement on which petitioners rely (Br. 25) draws a conclusion different from the Commission’s judgment, but it contains no evidence that demonstrates error in the agency’s prediction.

**D. The Commission Did Not Depart From Its Rules Or Precedents.**

Petitioners claim (Br. 26-27) that the FCC violated its own rule that provides DBS service with protection from harmful interference from terrestrial services. 47 C.F.R. § 2.106 note 5.490. The predicate of that argument is that MVDDS will cause harmful interference, which, as explained above, the FCC reasonably rejected. We have also shown why the unlikely

possibility that a future DBS subscriber might be exposed to MVDDS signals above the EPFD limit does not constitute harmful interference.<sup>7</sup>

*Kentown Speedway*, 1 FCC 2d 889, is not to the contrary. That case involved interference to ordinary television reception, which, unlike DBS, has no unavoidable amount of service unavailability due to weather or other factors. Consumers thus expect uninterrupted service. What constitutes harmful interference depends on the service, and the Commission may properly consider the disruption of an ordinary television signal to be harmful but deem small disruptions in DBS non-harmful. Moreover, unlike MVDDS interference, the interference at issue in *Kentown* appears to have been continuous while the interfering service (a toy race-car track) was operating.

**E. The Commission Adequately Explained Why It Decided Not To Use Alternative Frequency Bands.**

The satellite petitioners asked the Commission to relegate MVDDS to spectrum other than the 12 GHz band, claiming that doing so would allow MVDDS to operate without the complications posed by the 12 GHz band. The Commission rejected that request, and petitioners now argue that the Commission’s decision was arbitrary. Br. 27-32.

The Commission adequately explained its rejection of the satellite petitioners’ not-in-my-backyard arguments. It found that spectrum sharing in the 12 GHz band “would intensively reuse available spectrum, allowing for efficient use of the band,” thus serving the public interest. *First Order* ¶167 (JA 174). The 12 GHz band, the Commission noted, “is particularly attractive

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<sup>7</sup> Petitioners claim that “some current ... DBS subscribers will be unable to avoid interference,” Br. 27, but that is not true – the rules forbid the MVDDS provider from operating its system unless it can “ensure” that there will be no exposure over the EPFD limit “at all DBS customers of record locations.” 47 C.F.R. § 101.1440(a).

both because MVDDS equipment can take advantage of the economies of scale that already exist for such electronics and antennas that use this band and because the band offers sufficient spectrum to offer” competitive service. *Id.* ¶168 (JA 174) (footnote omitted). Other bands, the Commission found, “are not as attractive” because they “either do not offer the same amount of spectrum, are encumbered by existing operations, impose higher equipment costs, or have significant propagation constraints.” *Ibid.*; accord *Second Order* ¶52 (JA 320). The use of the 12 GHz band, on the other hand, will facilitate “innovative spectrum sharing techniques [that] will facilitate a high level of frequency reuse.” *First Order* ¶168 (JA 174).

The Commission explained further on reconsideration that “sharing of the 12 GHz band presents a unique situation” because of the “extensive analytic record derived from the MITRE Report as well as the experimental MVDDS test operations” in the band. *Second Order* ¶36 (JA 316). Referring specifically to one particular alternative band, but using reasoning that may be applied to any of the bands petitioners now argue about, the Commission found that “[u]nlike the current DBS usage in the 12 GHz band, where sharing is enabled by DBS receive antennas that point generally southwards and upwards toward the geostationary arc, the antennas in the CARS band point in many different directions.” In that situation, spectrum sharing becomes “far more complicated.” *Id.* ¶52 (JA 320-321).<sup>8</sup>

Petitioners fail to come to grips with the Commission’s point that spectrum sharing with existing *satellite* services is more feasible than sharing with existing *terrestrial* services due to the physics of satellite antenna reception. *Fourth Order* ¶52 (JA 540-541). All of the alternative

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<sup>8</sup> Thus, to the degree the Commission suggested elsewhere that MVDDS use of CARS spectrum was a “valid issue,” *see* Br. 30 (we think that petitioners improperly read the passage cited), the Commission laid the matter to rest in the later-issued *Fourth Order*.

bands suggested are already in extensive use by terrestrial providers, which blocks a new service from providing a ubiquitous coverage. Moreover, it appears from at least some of the petitions for reconsideration that the DBS providers were suggesting not spectrum sharing at all, but that MVDDS providers simply purchase spectrum licenses from other users in the secondary market. *See, e.g.*, EchoStar petition for reconsideration at 22 (JA 1053). The Commission found that significant public interest benefits would accrue from the “intensiv[e] reuse” of spectrum, *First Order* ¶167 (JA 174), and § 2002(a) of RLBSA required the Commission to facilitate usage on “spectrum otherwise allocated to commercial use” – *i.e.*, spectrum sharing. Petitioners’ proposals would have obviated that benefit.

### **III. NORTHPOINT’S CLAIMS LACK MERIT.**

We now turn to Northpoint’s challenges. In contrast to the satellite petitioners, Northpoint agrees with the Commission that MVDDS can share spectrum with DBS without causing harmful interference. Northpoint objects to the manner in which the Commission assigned MVDDS licenses. Its basic claim is that the Commission should have given it a license free of charge rather than auctioning licenses.

#### **A. Northpoint Lacks Standing.**

In order to have standing under Article III, a litigant must demonstrate that it has suffered a concrete injury that was caused by the action complained of and would be redressed by a decision in its favor. *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560-561 (1992). Northpoint fails that test because its injury is not redressable.

Northpoint’s application for a license in the 12 GHz band could not be granted without a number of rule waivers. The Commission denied the waivers and, as a result, dismissed Northpoint’s application, for a number of reasons. The Commission found that “a waiver of our

rules would [not] resolve all of the sharing issues involved in introducing ... a new service into the [12 GHz] band.” *Second Order* ¶216 (JA 385). It found that “the underlying purpose of the technical and licensing rules of which Northpoint seeks a waiver could [not] be served” by a waiver, but that a rulemaking proceeding to establish industry-wide rules would be “a better tool ... grant to resolve ... concerns [about interference] and to set technical parameters.” *Id.* ¶223 (JA 387). Northpoint did not, however, apply for a license under the industry-wide rules.

Northpoint *does not challenge the waiver denials*, and the dismissal of its application on that independent ground is accordingly final. Yet, by declining to refile when the Commission opened a filing window for MVDDS applications, Northpoint left itself without any application that could be granted. At this point, Northpoint is not and cannot become a valid applicant for an MVDDS license, and a decision in its favor on any of the grounds it raises would not restore its original application, create an application under the industry-wide rules, or secure it a license in the absence of an application. A Northpoint victory can result in no remediation of any injury.

Northpoint should have addressed this matter in its opening brief. “[A] petitioner whose standing is not self-evident should establish its standing by the submission of its arguments ... at the first appropriate point in the review proceeding.” *Sierra Club v. EPA*, 292 F.3d 895, 900 (D.C. Cir. 2002).

**B. Auction Of MVDDS Licenses Complies With Applicable Statutes.**

**(1) The ORBIT Act.**

Northpoint contends that the ORBIT Act, 47 U.S.C. § 765f, prohibits auction of MVDDS licenses. That statute forbids the Commission from “assign[ing] by competitive bidding orbital locations or spectrum used for the provision of international or global satellite communications

services.” The claim is that because both DBS and NGSO-FSS are satellite services, the GHz band is “used for” such services, and the statute by its plain meaning forbids the auctioning of that same spectrum for any other use, including terrestrial use. Br. 10.<sup>9</sup>

Northpoint’s argument is a “*Chevron* Step I” claim: that the statute permits no interpretation but the one Northpoint proffers. That approach requires the statutory language to reveal the “unambiguously expressed intent of Congress” on the “precise question” at issue in the case. *Chevron*, 467 U.S. at 843. If “the statute is silent or ambiguous,” the analysis shifts to Step II, under which the Court will defer to the Commission’s interpretation so long as it is “based on a permissible construction of the statute.” *Id.* at 842-843. The “precise question” here is whether the ORBIT Act forbids auctioning licenses that will permit only terrestrial usage because the same spectrum is also used by other licensees for international satellite services. The statute plainly does not convey Congress’s unambiguous intent on that question.

The spectrum at issue here will be “used” by *NGSO-FSS providers* to provide international or global satellite service, but the use that is the subject of the MVDDS auction will be strictly *terrestrial*. The statutory phrase “used for the provision of international or global satellite communications services” does not directly address whether the ban on auctions applies to terrestrial usage in spectrum sharing situations. *See Second Order* ¶244 (statutory language is “not entirely clear”) (JA 394). Indeed, Northpoint recognizes that the Act “does not refer to where a particular transmitter may be physically located or the character of the party that will be using it.” Br. 10.

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<sup>9</sup> The Commission considers DBS service provided from orbital locations assigned to the United States by international agreement to be a domestic satellite service not covered by the ORBIT Act. *See Auction of Direct Broadcast Satellite Licenses*, 19 FCC Rcd 820 (2004), appeal pending, D.C. Cir. No. 04-1052.

In light of that ambiguity, the Commission reasonably concluded that the statutory ban does not apply because MVDDS spectrum rights will *not* be “used for the provision of international or global satellite services.” See *Second Order* ¶244 (statute “appear[s] to focus on whether the particular spectrum being ‘assigned’ is ‘used for’ international or global satellite communications services”) (JA 394). The statute’s application only to licenses for such satellite services is also reflected in its concurrent ban on the auctioning of “orbital locations,” which, of course, have utility only to satellite service.

The legislative history reveals that bans were intended to relieve international or global satellite providers of the threat of “concurrent or successive spectrum auctions” held by governments that jointly regulate international spectrum. H.R. Rep. No. 494, 105<sup>th</sup> Cong. 2d Sess. 64-65 (1998). That policy is embodied in the statute’s instruction that the President must “oppose in [international communications fora] any assignment by competitive bidding of orbital locations or spectrum used for the provision of such services.” 47 U.S.C. § 765f. No such concerns are implicated with spectrum licenses that “would be ‘assigned’ to licensees and auctioned only for domestic terrestrial use.” *Second Order* ¶244 (JA 395). The Commission thus reasonably found that the ORBIT Act “does not prohibit the auction of spectrum licenses for terrestrial uses where the same spectrum may also be used for global or international satellite communications purposes by other licensees.” *Ibid.*

Nothing in Northpoint’s brief is to the contrary. Both *National Public Radio, Inc. v. FCC*, 254 F.3d 226 (D.C. Cir. 2001), nor *NCTA v. Gulf Power Co.*, 534 U.S. 327 (2002), involved entirely unrelated statutes, neither of which the Court found to be ambiguous in its application. Nor does it make a difference whether or not the Commission has created “new and

distinct” spectrum, Br. 11, because MVDDS use of the spectrum will not be for international or global satellite services and thus does not fall within the terms of the statutory restriction.

**(2) The LOCAL TV Act.**

The LOCAL TV Act, 47 U.S.C. § 1110 (located at page A-18 of Northpoint’s statutory appendix), directs the FCC to “provide for an independent technical demonstration of any terrestrial service technology proposed by any entity that has filed an application to provide terrestrial service in the [12 GHz band] to determine whether the terrestrial service technology proposed to be provided by that entity will cause harmful interference to any direct broadcast satellite service.” *Id.* § 1110(a). With respect to “pending applications,” the statute directs the agency to arrange for a technical demonstration within 60 days. *Id.* §1110(b).

In addition to its inability to satisfy the standing requirements of Article III, Northpoint lacks prudential standing to raise claims under the LOCAL TV Act. The statute plainly was intended to protect DBS providers from harmful interference. It was not intended to protect non-DBS parties such as Northpoint, whose interests are opposed to those of DBS operators. Indeed, Northpoint *agrees* with the agency (in disagreement with the satellite petitioners) that MVDDS will not cause harmful interference to DBS service. Northpoint’s interests are thus “so marginally related to or inconsistent with the purposes implicit in the statute that it cannot reasonably be assumed that Congress intended to permit the suit.” *Clarke v. Securities Industry Assn.*, 479 U.S. 388, 399 (1987). *See Ethyl Corp. v. EPA*, 306 F.3d 1144, 1148 (D.C. Cir. 2002) (zone of interests test excludes “parties whose interests are not consistent with the purposes of the statute in question”).

If the Court nevertheless reaches the merits, it should reject Northpoint’s arguments that under the Act, it was the only qualified applicant and therefore must be awarded an MVDDS license free of charge.

**(a) Independent Technical Demonstration.**

The statute requires a “technical demonstration” of “technology proposed to be provided” by a terrestrial licensee. MITRE tested Northpoint’s hardware, and the Commission developed industry-wide EPFD limits. Together, those steps ensure that MVDDS service technology will not cause harmful interference; the Commission found in this context that MITRE’s analysis provided the requisite technical demonstration of technology for all applicants that will operate within the technical parameters specified by the Commission. *Second Order* ¶234 (JA 390). Northpoint disagrees and contends that the statute requires that every applicant separately submit its own hardware for individual testing. Br. 19-20. The gist of that *Chevron* Step I argument is that the phrase “technical demonstration of ... technology” necessarily refers to testing a particular carrier’s hardware: “[a] demonstration is a showing; it involves real hardware, not theory.” Br. 19.

Northpoint’s interpretation is wrong because of the ambiguous statutory term “technology.” The Commission found that it “could refer to an individual company’s operations,” or it could refer “more generally to a set of technical specifications.” *Second Order* ¶234 (JA 390). After “weighing the statutory objectives at issue and the ability of the Commission’s rules to vindicate Congress’ goals,” the Commission concluded that “the operating parameters for MVDDS licensees, developed through the MITRE testing and codified by this Order, define the ‘terrestrial service technology’ already tested and deemed capable of sharing with direct broadcast satellite service without causing harmful interference.” *Id.* ¶234

(JA 390-391). In other words, the particular hardware used to produce a radio signal that complies with the new MVDDS rules is immaterial to the interference potential of that signal. The testing conducted pursuant to the statute demonstrated that a signal that complies with the MVDDS technical restrictions will not cause harmful interference. Accordingly, an MVDDS system operated in conformity with the restrictions is a “terrestrial service technology” that has been the subject of a “technical demonstration” within the meaning of the statute.

That reading of the statute was reasonable. Dictionaries define “technology” in various ways. One defines it as “the scientific method and material used to achieve a commercial or industry objective.” American Heritage Dictionary of the English Language at 1843 (3d ed. 1992). Another defines it to mean “a technical method of achieving a practical purpose.” Webster’s New Collegiate Dictionary at 1197 (1977). *See Second Order* n.575 (JA 390). Those definitions indicate that a “technology” does not necessarily mean only *hardware*, as opposed to scientific or technical *methods*. The Commission thus could reasonably find that an MVDDS system operated within parameters developed pursuant to MITRE’s test of Northpoint’s hardware and FCC-developed engineering models constitutes a method of providing service – a technology – within the meaning of the statute, without regard to the particular hardware used to operate the system.

The evident statutory purpose confirms that reading of the language. The focus of the statute shows that Congress required testing not for its own sake, but “to ensure that terrestrial services operated in the [12 GHz] band would not cause harmful interference.” *Second Order* ¶235 (JA 391). The Commission found that as long as an MVDDS operator complies with the EPFD limitations and the mitigation rules, no harmful interference will result, and the fundamental purpose of the statute will have been fulfilled. Indeed, Northpoint has agreed with

the Commission throughout this proceeding that the engineering models are reliable and that MVDDS will not cause harmful interference. Northpoint has not alleged that MVDDS hardware other than the specific transmitter tested would cause interference when it is operated within the EPFD limitations. In those circumstances, the Commission's reading of the statute will fulfill Congress's intent; by contrast, Northpoint's interpretation would lead only to testing that "would be superfluous given [the] technical rules." *Id.* ¶235 (JA 391).

**(b) Deadline For Testing.**

Congress directed in § 1110(a) that there be an "independent technical demonstration" for future applications, and it required in subsection (b) that with respect to *pending applications* the testing take place within 60 days of enactment of the LOCAL TV Act (a deadline that the Commission met with the MITRE report).<sup>10</sup> Northpoint argues that it was the only qualified applicant because only it met the 60-day testing deadline. Br. 21.

Northpoint misreads the statute. Northpoint interprets subsection (b) as having established a 60-day cut-off period for competing applicants. But the statute says nothing about cutting off applications and thereby penalizing potential applicants in the event the Commission failed to satisfy the 60-day demonstration deadline, and Northpoint has supplied no evidence that Congress intended that result. *See Second Order* ¶246 (JA 395-396); *Fourth Order* ¶85 (JA 557). Nor should Congress be deemed to have limited potential applicants' rights in such an oblique manner: the Court has held that the FCC may not "rejec[t] an application as untimely

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<sup>10</sup> There has accordingly been no "bald refusal to comply with a statutory deadline for action." Br. 22. Neither did RLBSA contain a deadline for issuing licenses, as Northpoint wrongly suggests. *Ibid.* (citing RLBSA § 2002(a)). The Commission met the RLBSA deadline when it "made a determination" to authorize the licensing of MVDDS systems to share spectrum with DBS.

based on an ambiguous cut-off provision,” but must give “explicit notice of all applicable requirements.” *Florida Institute of Technology v. FCC*, 952 F.2d 549, 550 (D.C. Cir. 1992) (citations omitted). “[I]f Congress had intended to establish a 60-day cut-off ... it could have done so explicitly.” *Second Order* ¶246 (JA 396), *see also id.* n.605 (JA 396). We cannot say why Congress enacted a 60-day time limit on testing only for pending applications, but one possibility is that Congress wanted the FCC to have an early determination whether MVDDS would work at all before the agency spent more resources on the matter. Another is that Congress believed that early testing of pending applications under subsection (b) would provide the basis for satisfying the technical demonstration requirement of subsection (a) for future applications.

**(c) FCC Use Of Northpoint Equipment.**

Northpoint claims that “no other applicant could have qualified” for an MVDDS license without the FCC’s having unlawfully “appropriate[d]” Northpoint’s “proprietary and patented technology.” Br. 23.<sup>11</sup> The claim is that because the MITRE testing was conducted on Northpoint’s equipment, pursuant to a license agreement with the FCC that limited use of the equipment to matters “solely in connection with” Northpoint’s application, MITRE’s testing may not be used to support any other application.

Northpoint’s characterization of its license agreement is highly misleading. When the FCC signed the license agreement, it *expressly rejected* the very limitation that Northpoint now seeks to place on that agreement, and Northpoint agreed to the license without that limitation.

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<sup>11</sup> We note that, although at the time of the MITRE testing, Northpoint’s technology was covered by various patents, a jury subsequently found some of those patents to be invalid. *See TRDaily*, Nov. 3, 2003. The jury’s verdict is now on appeal.

On January 12, 2001, counsel for Northpoint (the same counsel that represents it here) wrote to the FCC Chairman proposing to enter into a license agreement to allow testing on two express conditions: first, that the demonstration “shall be used ... solely for the purpose of arriving at a determination regarding the pending application of Northpoint; and second, that “neither the demonstration nor its results shall be used or relied upon by the Commission in its determination as to whether any terrestrial service ... proposed by any other applicant would cause harmful interference ...” (JA 860). On January 22, 2001, Northpoint submitted to the agency a draft license agreement that contained those clauses verbatim (JA 875-877). The first condition appears in the license agreement as executed. *See* Addendum B to Northpoint Brief at page NTP 02674 and JA 887. But the Commission expressly rejected the second one. On February 15, 2001, the Commission told Northpoint that it “accepts this license agreement with the explicit understanding that the license agreement does not constrain the FCC in the exercise of its responsibilities, including without limitation, the FCC’s use of the MITRE test results ... [and] acceptance of competing MVDDS applications” (JA 885). In accordance with that understanding, the executed version of the license agreement *did not include the second limitation clause* (JA 887-888). On that record, the license agreement cannot be construed to incorporate the rejected condition. Even if it could be, the remedy would be a damages suit for breach of contract, not the invalidation of licenses already awarded to third parties.

**C. Northpoint Experienced No Unlawful Discrimination.**

Northpoint claims it was unlawfully discriminated against vis-à-vis NGSO-FSS license applicants. As a result, says Northpoint, NGSO applications were accepted for filing before MVDDS applications; MVDDS was accorded only 500 MHz of spectrum, while NGSO-FSS was allocated 3,250 MHz; and MVDDS licenses were auctioned whereas NGSO-FSS licenses

were not. Br. 6, 12-14. That argument overlooks the substantial differences between the two categories of applicants.

An agency must treat similarly situated parties similarly, but where there are “salient distinction[s]” between one party and another, it is not a case of “different treatment of similarly situated parties” and there is no error. *Mountain Solutions, Ltd., Inc. v. FCC*, 197 F.3d 512, 518 (D.C. Cir. 1999); accord *Chadmoore Communications v. FCC*, 113 F.3d 235, 242 (D.C. Cir. 1997). Northpoint claims to have been in the same position as the NGSO-FSS applicants because the agency “made clear that it viewed [both sets of applicants] as part of a single proceeding in which it would determine whether the 12-GHz Spectrum could be shared and, if so, how sharing rights would be allocated among the eight interested parties.” Br. 4.

Northpoint overlooks critical differences and misstates important facts. Unlike MVDDS terrestrial applications, NGSO-FSS satellite applicants did not request waivers of the FCC’s rules governing the 12 GHz band. Moreover, NGSO-FSS had already been the subject of several years of international coordination proceedings to establish interference protections. The Commission did not have to conduct its own engineering analysis from scratch, as it did with MVDDS. *NGSO Notice*, 114 FCC Rcd at 1135 ¶4; *First Order* ¶¶12-15 (JA 119-120). In those circumstances, the Commission properly declined to accept Northpoint’s application for filing, even though it accepted SkyBridge’s. See *PLMRS Narrowband Corp. v. FCC*, 182 F.3d 995, 1000 (D.C. Cir. 1999) (“We see nothing arbitrary or capricious in the Commission's decision to defer issuing licenses until it has finally settled upon the rules for doing so.”). Moreover, it makes sense for the Commission to solicit applications for non-auctionable services up front, in order to employ the most effective engineering solutions for spectrum sharing, but no such considerations apply to terrestrial services that are required by statute to be auctioned.

Nor was MVDDS discriminated against because NGSO-FSS received a greater spectrum allotment. The two services were not, as Northpoint incorrectly implies, competing for the same fixed amount of spectrum to be divvied up evenly among the various parties. Br. 4, 14. Rather, Northpoint (as well as the other MVDDS applicants) sought only the 500 MHz of spectrum in the 12 GHz band, whereas the NGSO-FSS applicants applied for considerable additional spectrum in a number of different spectrum bands. Northpoint also “made it very clear [to the agency] that it does not perceive alternate frequencies outside the 12 GHz band to be desirable” for the provision of MVDDS service. *Second Order* ¶50 (JA 320). Nor did the allotment of 12 GHz band spectrum to NGSO-FSS preclude the allotment of that same spectrum to MVDDS, as Northpoint postulates – rather, MVDDS providers and NGSO-FSS providers will all use the 12 GHz band at the same time. The Commission decided to address the Northpoint and SkyBridge petitions in the same rulemaking proceeding, not because, as Northpoint would have it, the two were in the same position, but only because both sought permission “to operate in some of the same spectrum” and thus presented related issues. *NGSO Notice*, 14 FCC Rcd at 1138 ¶8.

That MVDDS licenses were auctioned while NGSO-FSS licenses were not reveals no discrimination. The ORBIT Act, 47 U.S.C. § 765f, forbids auction of NGSO-FSS licenses because NGSO-FSS is an international or global satellite service, but as discussed above, that restriction does not apply to MVDDS licenses, and Congress has generally required the agency to distribute licenses by auction. 47 U.S.C. § 309(j)(1). Nor does 47 U.S.C. § 309(j)(6)(E) require identical treatment of the two services. That provision states that the FCC’s authority to conduct auctions does not relieve it of “the obligation in the public interest to continue to use engineering solutions, negotiation, threshold qualifications, service regulations, and other means

in order to avoid mutual exclusivity in application and licensing proceedings.” Nothing in the statute addresses discrimination between different groups of applicants.

Furthermore, the Commission reasonably explained why (even before the ORBIT Act) it has not auctioned spectrum for international or global satellite services like NGSO-FSS: “The Commission has reached this conclusion because, *inter alia*, licensing such services requires international coordination; the inability of U.S. auctions to confer global licenses might prevent market entry by satellite providers interested in global service; and coordinated, multilateral-transnational auctions are not feasible.” *Second Order* ¶248 (JA 397). “Thus, the differences in the Commission’s licensing approaches to international satellite and terrestrial services have arisen from public interest considerations associated with the particular characteristics of the services and now are based as well on the different treatment of these services by Congress.” *Ibid.* That explanation satisfies § 309(j)(6)(E). *See Benkelman Telephone Co. v. FCC*, 220 F.3d 601, 606 (D.C. Cir. 2000).

Likewise incorrect is Northpoint’s reliance on *Ashbacker Radio Corp. v. FCC*, 326 U.S. 327 (1945). Br. 15-16. There, the Supreme Court held that the Commission could not grant one of two mutually exclusive applications without holding a comparative hearing on both of them. *Id.* at 330-331. Northpoint claims that the agency violated that rule “for all practical purposes” when it assigned NGSO-FSS licenses without auction, but auctioned MVDDS licenses. Br. 15. But MVDDS applications were not mutually exclusive with NGSO-FSS applications, so the *Ashbacker* rule does not apply here.

Finally, Northpoint claims that the Commission departed from agency precedent involving two instances where spectrum rights were not auctioned. To prevail, Northpoint must show that the Commission's action was “so inconsistent with its precedent as to constitute

arbitrary treatment amounting to an abuse of discretion.” *Lakeshore Broadcasting, Inc. v. FCC*, 199 F.3d 468 (D.C. Cir. 1999). Neither of the instances on which Northpoint relies is comparable. In the *Boeing Two-Way Order*, 16 FCC Rcd 22645 (2001), the Commission authorized Boeing’s use of spectrum on the condition that Boeing accept interference from any other authorized user. *Id.* ¶16. That condition of subordinate status eliminated the possibility of mutually exclusive applications; as such, there could be no auction. In the *MSS ATC Order*, 18 FCC Rcd 1962 (2003), the Commission permitted existing licensees to use their *already licensed spectrum* in new ways. *Id.* ¶1. The Commission expressly rejected as impracticable allowing new parties to share the spectrum. *Id.* ¶55. There was no issuance of new licenses and no opportunity for auction.<sup>12</sup>

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<sup>12</sup> Northpoint also claims that the Commission should have rejected as untimely any applications filed subsequent to its own. Br. 13 n.17. The theory is that a Public Notice seeking comment on Northpoint’s waivers should have served as a cut-off notice to other potential applicants. Northpoint did not raise that claim before the Commission, and it is barred by 47 U.S.C. § 405(a). In any event, *McElroy Electronics Corp. v. FCC*, 86 F.3d 248 (D.C. Cir. 1996), does not stand for the illogical proposition that a public notice seeking comment on a waiver request to provide service of a type that had not yet been authorized puts other parties on notice that they must file any competing applications.

**CONCLUSION**

For the foregoing reasons, the Court should deny the satellite petitioners' petitions for review and dismiss (or in the alternative deny) Northpoint's petitions and notices of appeal.

Respectfully submitted,

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July 8, 2004

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

NORTHPOINT TECHNOLOGY, LTD., ET AL.,	)	
	)	
APPELLANTS/PETITIONERS,	)	
	)	
V.	)	
	)	
FEDERAL COMMUNICATIONS COMMISSION AND UNITED STATES OF AMERICA,	)	No. 02-1194 <i>ET AL.</i>
	)	
APPELLEE/RESPONDENTS	)	
	)	
	)	
	)	

CERTIFICATE OF COMPLIANCE

Pursuant to the requirements of Fed. R. App. P. 32(a)(7), I hereby certify that the accompanying “Brief for Appellee/Respondents” in the captioned case contains 13966 words.

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