

United States Court of Appeals
FOR THE DISTRICT OF COLUMBIA CIRCUIT

Argued January 16, 1998

Decided February 6, 1998

No. 93-1110

JAMES L. MELCHER, ET AL.,
PETITIONERS

v.

FEDERAL COMMUNICATIONS COMMISSION AND
UNITED STATES OF AMERICA,
RESPONDENTS

CELLULARVISION USA, INC., ET AL.,
INTERVENORS

Consolidated with
Nos. 93-1111, 93-1112, 93-1113, 93-1114, 93-1115, 93-1116,
93-1117, 93-1118, 93-1119, 93-1120, 93-1122, 93-1123,
93-1124, 93-1125, 93-1126, 93-1127, 93-1128, 93-1130,
93-1131, 93-1132, 93-1133, 93-1134, 93-1135, 93-1136,
93-1137, 93-1139, 93-1140, 93-1142, 93-1143, 93-1144,
93-1145, 93-1146, 93-1147, 93-1148, 93-1149, 93-1150,
93-1152, 93-1154, 97-1368, 97-1371, 97-1380, 97-1386,
97-1393, 97-1415, 97-1431, 97-1483, 97-1484

On Petitions for Review of Orders of the
Federal Communications Commission

Frederick M. Joyce argued the cause for petitioners James L. Melcher, *et al.*, with whom *John Haven Chapman* and *Christine McLaughlin* were on the briefs. *James H. Barker, III, Michael R. Gardner, Tom W. Davidson, Daniel E. Troy* and *Robert L. Pettit* entered appearances.

Richard P. Bress argued the cause for petitioners United States Telephone Association, *et al.*, with whom *Maureen E. Mahoney, Gary M. Epstein, Michael E. Glover, James G. Pachulski, Mary M. McDermott, Linda Kent, M. Robert Sutherland, Gail L. Polivy* and *John F. Raposa* were on the briefs. *Frank W. Krogh* and *Andre J. Lachance* entered appearances.

Paul J. Sinderbrand argued the cause for petitioner U S West, Inc., with whom *L. Andrew Tollin, Robert G. Kirk, Craig E. Gilmore, Georgina M. Lopez-Ona* and *Robert B. McKenna* were on the briefs.

L. Marie Guillory argued the cause for petitioner National Telephone Cooperative Association, with whom *David Cosson* was on the briefs.

Joel Marcus, Counsel, Federal Communications Commission, argued the cause for respondents, with whom *Joel I. Klein*, Acting Assistant Attorney General, United States Department of Justice, *Robert B. Nicholson* and *Andrea Limmer*, Attorneys, *William E. Kennard*, General Counsel at the

time the brief was filed, Federal Communications Commission, *Christopher J. Wright*, General Counsel, *John E. Ingle*, Deputy General Counsel, *Carl D. Lawson* and *Roberta L. Cook*, Counsel, were on the brief. *Catherine G. O'Sullivan*, Attorney, United States Department of Justice, *Daniel M. Armstrong*, Associate General Counsel, Federal Communications Commission, and *David Silberman*, Counsel, entered appearances.

Glenn B. Manishin argued the cause for intervenors Web-Cel Communications, Inc., *et al.*, with whom *Matthew B. Pachman* and *John D. Windhausen, Jr.*, were on the joint briefs. *Frank W. Krogh* entered an appearance.

Caressa D. Bennet, *Michael R. Bennet*, *Gregory W. Whiteaker* and *Stephen G. Kraskin* were on the joint briefs for intervenors Rural Telecommunications Group, *et al.*

Before: EDWARDS, *Chief Judge*, WALD and ROGERS, *Circuit Judges*.

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

WALD, *Circuit Judge*: This case involves the Local Multi-point Distribution Service ("LMDS"), a new wireless mode of communication that supports video, voice, and data services. The crux of the dispute concerns the Federal Communication Commission's ("FCC") decision to bar incumbent local telephone companies (known as local exchange carriers, or "LECs"), including rural local telephone companies, from holding LMDS licenses in the same geographic areas in which they provide telephone service, for three years from the date of the upcoming LMDS auction.¹ The FCC explains that its Order is designed to prevent LECs from acquiring LMDS licenses in order to preempt competition in the local tele-

¹ The FCC's challenged eligibility restriction applies to both local exchange carriers and cable operators. One of the petitioners before us, U S West, Inc., provides both local exchange service and is the nation's third largest cable operator. However, U S West substantially replicates the arguments that the LEC petitioners advance, and relies on no critical distinctions between the situation of LEC and cable service providers.

phone market. The LEC and rural LEC petitioners, consisting of various trade associations as well as individual LEC companies, challenge the FCC's eligibility restriction on multiple grounds. In addition, a number of waiver applicants challenge the FCC's previous decision, promulgated while the FCC was devising the current regime, that denied them waivers of the rules that formerly governed use of the spectrum now designated for LMDS. We reject the claims put forth by the LECs, the rural LECs, and the waiver applicants, and accordingly deny their petitions for review.

I. BACKGROUND

A. The Regulatory Regime Before 1996

In 1970, the FCC adopted a cross-ownership rule prohibiting telephone companies from providing video programming directly to subscribers in their telephone service areas, because of concerns that telephone companies might monopolize the emerging cable industry. *See General Tel. Co. v. United States*, 449 F.2d 846, 851-52 (5th Cir. 1971). Congress eventually codified that rule in 1984. *See* 47 U.S.C. § 533(b), *repealed by* Telecommunications Act of 1996, Pub. L. No. 104-104, § 302(b)(1), 110 Stat. 56, 124 ("1996 Act"). Over the next two decades, however, it became apparent that this cross-ownership prohibition granted cable providers too much protection. By 1992, "most cable television subscribers ha[d] no opportunity to select between competing cable systems," resulting in "undue market power for the cable operator as compared to that of consumers and video programmers." Cable Television Consumer Protection and Competition Act of 1992, Pub. L. No. 102-385, § 2(a)(2), 106 Stat. 1460, 1460.

B. The Telecommunications Act of 1996

Congress enacted the Telecommunications Act of 1996 "to provide for a pro-competitive, de-regulatory national policy framework designed to accelerate rapidly private sector deployment of advanced telecommunications and information technologies and services to all Americans by opening all

telecommunications markets to competition." H.R. CONF. REP. NO. 104-458, at 1 (1996) ("Conference Report").²

The 1996 Act eliminates the ban on telephone-cable cross-ownership, *see* 1996 Act § 302(b)(1), and authorizes a variety of ways for telephone companies to deliver video services, including: (1) via Title III radio-based systems (the Title that includes LMDS); (2) as a common carrier under Title II; (3) via a Title IV cable system; and (4) through an Open Video System ("OVS"), *see id.* § 651.

The only specific reference in the legislative history of the 1996 Act to LMDS involves section 301(b)(3)(C) of the Act. This section amends 47 U.S.C. § 543(l)(1), which provides alternative definitions of "effective competition," by expanding the definition of that term to include: "a local exchange carrier or its affiliate (or any multichannel video programming distributor using the facilities of such carrier or its affiliate) [that] offers video programming services directly to subscribers *by any means* (other than direct-to-home satellite services) in the franchise area of an unaffiliated cable operator which is providing cable service in that franchise area, but only if the video programming services so offered in that area are comparable to the video programming services provided by the unaffiliated cable operator in that area." 1996 Act § 301(b)(3)(C) (emphasis added). The Conference Report on the 1996 Act states that "[b]y any means," includes any medium (other than direct-to-home satellite service) for the delivery of comparable programming, including MMDS [Mul-

² The House Report similarly stated that:

The original rationale for adopting the prohibition of telephone company entry into video services has been satisfied, and given the changes in technology and the evolution of the cable industry, the prohibition is no longer valid. In fact, three governmental bodies, the [FCC], the Commerce Department's National Telecommunications and Information Administration (NTIA) and the Department of Justice's Antitrust Division have expressly found that the statute impedes competition in the cable industry.

H.R. REP. NO. 104-204, pt. 1, at 52-53 (1995).

tichannel Multipoint Distribution Service], LMDS, an open video system, or a cable system." Conference Report, at 170.

The 1996 Act seeks additionally to stimulate competition in the local telephone market, requiring, for instance, incumbent local telephone companies to interconnect with the facilities and equipment of their competitors. *See* 1996 Act § 251(c)(2); *see also id.* § 251(c)(3) (duty to provide "unbundled access"); *id.* § 251(c)(4)(A) (duty "to offer for resale at wholesale rates any telecommunications service that the carrier provides at retail to subscribers who are not telecommunications carriers"). Along the same lines, section 271 of the 1996 Act provides that a Regional Bell Operating Company ("RBOC") may provide long-distance service, but only after that RBOC has demonstrated that it has met all the requirements for opening its local telephone market to competition and the FCC has found that "the requested authorization is consistent with the public interest, convenience, and necessity." *Id.* § 271(d)(3)(C).

C. *The FCC's Rulemaking on LMDS*

On January 8, 1993, three years before the passage of the 1996 Telecommunications Act, the FCC released a Notice of Proposed Rulemaking that proposed redesignating the 28 GHz spectrum for LMDS. *See* In the Matters of Rulemaking to Amend Part 1 and 21 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, 8 F.C.C.R. 557 (released Jan. 8, 1993) ("first NPRM"). This first NPRM stated that the FCC did not propose to adopt cross-ownership restrictions on acquiring LMDS licenses, explaining that:

The evidence before us suggests that the most likely first use of the 28 GHz band will be video entertainment programming.... There is no assurance this will be the case, or that even if it is the predominant use, that it will be the most viable use in all geographic areas. In view of this uncertainty, we are inclined not to exclude any existing video distribution or telecommunications firm from constructing and operating 28 GHz facilities. We

seek comment on our tentative policy conclusion that cross-ownership restrictions should not be imposed.

Id. ¶ 33. The FCC then denied the 971 outstanding requests for waivers of the rules that formerly governed use of the spectrum now tentatively designated for LMDS. *See id.* ¶¶ 51-53. (These rejected waiver applicants had sought to provide point-to-multipoint service on the 28 GHz band, at a time when only point-to-point service was authorized. *See id.*) Many of the applicants, including all of the petitioners in this case who challenge the waiver denials, petitioned the FCC for reconsideration of the first NPRM. *See* In the Matter of Rulemaking to Amend Parts 1, 2, 21, and 25 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, at ¶ 385 n.595 (released Mar. 13, 1997) ("Order"). In addition, these waiver applicants concurrently sought review of the FCC's denial of their waiver requests in this court. This court held the latter petitions in abeyance pending the completion of the FCC's reconsideration process.

The FCC's Third Notice of Proposed Rulemaking, released in July 1995, solicited "further comment on competitive issues" associated with LEC acquisition of in-region LMDS licenses. In the Matter of Rulemaking to Amend Parts 1, 2, 21, and 25 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, 11 F.C.C.R. 53, at ¶ 101 (released July 28, 1995) ("third NPRM"). Specifically, the third NPRM asked a number of questions, including:

To what extent can this [28 GHz band] spectrum be used to provide service that is competitive with local telephone service, particularly the provision of access services to residential and business subscribers? Would allowing a LEC to acquire LMDS licenses in its service area eliminate a potential and important new source of competition in the local exchange market? Given the LECs' current monopoly status with regard to the provision of local exchange service, would LECs be likely to acquire LMDS spectrum as a means of forestalling competitive entry into the local exchange market, for example, by

warehousing spectrum or diverting it to less optimal uses?

Id.

Congress passed the Telecommunications Act of 1996 several months after the release of this third NPRM. The FCC accordingly sought "specific comment on how our policies towards LMDS eligibility would best promote the competitive objectives of the 1996 Act." In the Matter of Rulemaking to Amend Parts 1, 2, 21, and 25 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, 11 F.C.C.R. 19005, at ¶ 105 (released July 22, 1996) ("fourth NPRM"). The Commission explained its current reasoning this way:

In considering eligibility for LECs and cable operators within their geographic service areas one must weigh the potential for competition presented by open entry against the possibility that this spectrum may be used to forestall rather than promote competition. Open eligibility may delay or eliminate an opportunity to increase the number of competitors in the local exchange telephony and multichannel video programming markets. On the other hand, a bar on eligibility could prevent LECs and cable operators from using LMDS to compete against each other more effectively and rapidly or to provide new services not now offered by any firm.

Id. ¶ 125.

The FCC released its Final Order on March 13, 1997. This Order placed a three-year ban on LECs acquiring LMDS licenses within their service areas, *see* Order WW 157-99, and denied reconsideration of the Commission's earlier denial of the waiver applications, *see id.* WW 383-406. In explaining its decision to impose this three-year eligibility restriction, the Commission stated that,

Based on the record here, standard economic theory, our experience, an analogous situation in the cable TV industry, and our assessment of competitive and regulatory developments in the local telephony and MVPD [Multichannel Video Programming Distributor] markets,

we find on balance that a policy favoring restricted eligibility for a limited time would result in the greatest likelihood of increased competition in the local telephony and MVPD markets. By restricting in-region LEC and cable companies, we ensure the entry of a new LMDS operator that could provide competition in the LEC market, the MVPD market, or both. An incumbent, on the other hand, would have a strong incentive to obtain an LMDS license in order to prevent a new entrant from obtaining the license and competing directly in the incumbent's current market. In so doing, such an incumbent will have forestalled market entry by an entity that could provide both telephony and MVPD and will have deprived consumers of an opportunity to choose between a possible two providers in each market and the lower prices for such services that consumer choice necessarily implies. Furthermore, either incumbent would have no incentive to use the LMDS spectrum to provide the service in which it has market power because this could result in lower prices for the service, and lower profits. By temporarily restricting incumbents' eligibility to acquire in-region LMDS licenses, this policy maximizes the likelihood of increasing competition in both the LEC and MVPD markets.

Id. ¶ 162.

Although rural LECs had asked the FCC to exempt them from this eligibility restriction, the Commission decided against granting such an exception. The rural LECs argued that rural residents would likely be deprived of access to LMDS services unless the incumbent rural LECs were permitted to acquire LMDS licenses in their existing service areas. *See id.* ¶ 179. The FCC disagreed. It noted, *inter alia*, that even incumbent rural LECs would only provide LMDS service where it was profitable to do so, and that outsiders should be equally willing to acquire and operate licenses in such situations. *See id.* ¶ 180. The FCC further found it unlikely that many rural LECs would be subject to the eligibility bar, *see id.*, because the restriction only applies to a LEC if ten percent or more of the population in the basic

trading area ("BTA") that the desired LMDS license covers is also within the LEC's authorized telephone service area, *see id.* ¶ 188, and BTAs typically encompass geographic areas that are significantly larger than a rural LEC's service area, *see id.* ¶ 180.

II. ANALYSIS

A. *The LEC Petitioners*

The LEC petitioners challenge the FCC's imposition of the eligibility restriction under section 706(2)(A) of the Administrative Procedure Act ("APA"), which requires this court to "hold unlawful and set aside" the FCC's Order to the extent that it is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2)(A).

1. *Whether the FCC has Changed its Policy Without Explanation*

The LECs argue, first, that the FCC's Order constitutes arbitrary decision making in violation of APA § 706(2)(A) because it is an unexplained departure from prior rules that authorize and encourage LECs to offer new wireless communication services. Along these lines, the LECs note that in 1981 the FCC set aside one cellular service license per market exclusively for the use of the incumbent LEC. *See* Final Brief of Petitioners United States Telephone Association, *et al.*, at 14-15, *citing* In the Matter of an Inquiry into the Use of Bands 825-845 MHz and 870-890 MHz for Cellular Communications Systems, 86 F.C.C.2d 469, 483, 488, 491-92 (1981). Similarly, although the FCC was initially concerned that LECs might use the Personal Communications Service ("PCS"), another wireless communications technology, for anticompetitive ends, it decided in 1993 to include LECs in the bidding on the ground that LEC participation would promote the rapid development of the technology and yield a broader range of services at a lower price. *See id.* at 15, *citing* In the Matter of Amendment of the Commission's Rules to Establish New Personal Communications Services, 7 F.C.C.R. 5676, 5705 (1992); 8 F.C.C.R. 7700, 7751-52 (1993). The LECs contend that the FCC's reasons for permitting

LECs to acquire and use these other wireless services apply as strongly in the LMDS context and that the FCC has failed to differentiate its prior decisions from the instant eligibility restriction.

Although the portion of the FCC's Order devoted to this issue is relatively brief, we find that it adequately explains why the FCC reached a different conclusion about LEC eligibility in the case of LMDS than in the earlier technologies. In balancing the advantages and disadvantages—in terms of competition and technological development—of granting incumbent LECs unrestricted access to a new wireless technology, the FCC's Order indicates that there are at least three important factors that differentiate the LMDS situation.

The first factor is the number of licenses available per area. In the earlier cases, there were several licenses available in each market. With LMDS, in contrast, the Commission found "that the temptation for preemptive acquisition is particularly compelling ... because of the unusually large size of the LMDS spectrum allocation. A single, large spectrum block of relatively unused spectrum will be auctioned in each service area." Order ¶ 173.

The second factor, which is related to the first, is the unprecedented capacity of an 1,150 megahertz LMDS license, which is the single biggest license that the FCC has ever issued. As the FCC's Order explains:

LMDS licenses may be used to provide service in the local MVPD [Multichannel Video Programming Distributor] market, the local telephone market, a broadband data market, or a combination of these possibilities.... LMDS offers a significant amount of capacity, larger than currently available wireless services. For instance, according to TI [Texas Instruments, Inc.], the LMDS system they have manufactured for use in other countries can be used to serve 16,000 telephone subscribers, in each LMDS cell with a three-mile radius, concurrently with about 200 video-on-demand channels....

....

... [T]he capacity of an LMDS license is unprecedented.

Id. ¶¶ 170, 173. In other words, a single LMDS license can simultaneously support 16,000 telephone calls and 200 video channels on demand, a capacity that makes the FCC extremely wary about the possibility that incumbent LECs would devote their in-region LMDS licenses only to communications services that do not compete with the LECs' existing telephone services.

The third differential factor is that the FCC's earlier decisions, none of which purported to announce any general policy against eligibility restrictions on LECs, were made at a time when the prospects for generating competition in the local telephone market, and for developing new technologies without maximum participation from incumbent LECs, were significantly less. The FCC's Order observes:

We recognize that as a result of ongoing technological changes and passage of the 1996 Act, there are other sources of potential and actual competition to the incumbent LEC and cable firms in the local telephony and local MVPD [Multichannel Video Programming Distributor] markets. For multichannel video distribution, likely sources of competition include open video systems (OVS), MMDS [Multichannel Multipoint Distribution Service], DBS [Direct Broadcast Satellite], FSS [Fixed Satellite Service] program distributors, and satellite master antenna television systems. For fixed voice and broadband data services, the competitive alternatives include new facilities-based, wireline entrants, such as interexchange carriers (IXCs), competitive access providers (CAPs), and cable firms, non-facilities-based entrants utilizing the new local competition provisions of the 1996 Act, and a variety of wireless possibilities, including PCS [Personal Communications Service] and cellular service providers. In many of the foregoing cases, LECs may enter MVPD

markets and cable television firms may enter local exchange markets.

Id. ¶ 163.

In light of the discussion in the FCC's Order that reviews these three differential factors, we find that the Commission has adequately explained why it came to a different conclusion about LEC eligibility in the case of LMDS than it reached in earlier cases involving different technologies.

2. *The LECs' Claim That the FCC Order is Not Supported by Substantial Record Evidence or Market Analysis*
 - a. *The LECs' Challenge to the FCC's Conclusion That LECs Might Acquire Exclusive LMDS Licenses in Order to Preempt Competition in Their Local Telephone Markets*

The LECs' second argument challenges the three propositions that they contend underlie the FCC's "preemptive acquisition" rationale: (1) that the LECs exercise monopoly power; (2) that a LEC could prevent in-region competition from eroding this monopoly power by acquiring the LMDS license for its service area; and (3) that an unaffiliated entity would likely use a LMDS license to compete both in the local telephony market and in the local subscriber video market.

The LECs contend that the first premise, that of monopoly power, is factually inaccurate. Here, they cite to the existing regulatory scheme that is designed to counteract the LECs' monopoly position. They further observe that in one recent proceeding the FCC itself found that "applicable statutory and regulatory safeguards [were] likely to be sufficient to prevent the BOCs [Bell Operating Companies] from improperly allocating costs between their monopoly local exchange and exchange access services and their affiliates' competitive interLATA services to such an extent that their interLATA affiliates would be able to eliminate other interLATA service providers and subsequently earn supra-competitive profits by charging monopoly prices." In the Matter of Regulatory Treatment of LEC Provision of Interexchange Services Originating in the LEC's Local Exchange Area, at ¶ 104 (released

Apr. 18, 1997). All that statement demonstrates, however, is the FCC's belief that, in the particular context of interLATA affiliate services, regulatory controls would be able to offset the risk of LECs abusing their monopoly. The LECs have not shown that the FCC's conclusion in the present case, that the LECs would likely resist competing against themselves in the telephony market, is unreasonable or that it lacks substantial evidence in the record. As the FCC's Order elaborates, the Commission's judgment about the precise situation at issue in this case rests not only on economic theory and analysis, but on predictive comments from the Department of Justice, the Federal Trade Commission, and several state attorneys general, three outside economists' conclusions that LECs have substantial market power and are likely to behave preemptorily, as well as the agency's own expertise. *See* Order ¶¶ 157-78. Moreover, the FCC has found in recent proceedings other than the one petitioners cite that LECs do currently exercise monopoly power over the provision of local telephone service and that eroding that power is in the public interest. *See id.* ¶ 163 & n.251.

The LECs challenge the FCC's second and third premises for the eligibility restriction—that a LEC could prevent competition from eroding its monopoly power by acquiring the LMDS license for its service area and that an unaffiliated entity would likely use a LMDS license to compete both in the local telephony and local subscriber video markets—as unduly speculative. With regard to the second premise, the LECs contest the relevance of an analogy that the FCC's Order draws to anticompetitive behavior that occurred in the cable industry in the early 1990s when satellite broadcast service providers emerged as potential competitors to local cable companies. *See id.* ¶¶ 166-69. In that situation, incumbent, monopolist local cable companies "were alleged to have stifled competition from their non-cable competitors, such as DBS [Direct Broadcast Satellite] operators, and to have attempted to suppress the development of DBS technology as a competitor to cable television service." *Id.* ¶ 166. The LECs point to what they regard as controlling distinctions between that case and the present one, noting particularly

that the earlier case involved different market conditions and that the anticompetitive concern in the cable situation stemmed from the vertical integration between certain cable operators and programmers, whereas vertical integration is not a factor in the present case. With regard to the third premise, the LECs observe that the FCC has not established that LMDS will be used by non-LEC licensees to compete with the existing local telephone network, pointing to portions of the Order that instead state that "[i]t is expected that many [of the telecommunications services that may be provided in LMDS] *may* be offered in the local telephony marketplace as an alternative to the wired telephone network." *Id.* ¶ 210 (emphasis added); *see also id.* ¶ 176 ("[W]e do not know at this time whether the LMDS spectrum is best used for local telephone, video, or something else."). The LECs also point to other means by which competitors can enter the local exchange market, although the FCC is substantially less confident that these other technologies will actually create significant competition in the local telephone market. *See id.* ¶¶ 164-65.

In considering these claims, we must keep in mind our standard of review. As both the Supreme Court and this circuit have made clear, our review of the FCC's exercise of its predictive judgment is particularly deferential. In *FCC v. National Citizens Committee for Broadcasting* ("NCCB"), 436 U.S. 775 (1978), another case in which FCC rulemaking that established eligibility criteria for communications licenses was challenged as arbitrary, the Supreme Court held that the FCC was not required to "conclusively establish" the factual validity of the agency's premises. *Id.* at 796. As the Supreme Court explained,

to the extent that factual determinations were involved in the Commission's decision ..., they were primarily of a judgmental or predictive nature.... In such circumstances complete factual support in the record for the Commission's judgment or prediction is not possible or required; "a forecast of the direction in which future

public interest lies necessarily involves deductions based on the expert knowledge of the agency."

Id. at 813-14 (quoting *FPC v. Transcontinental Gas Pipe Line Corp.*, 365 U.S. 1, 29 (1961)). This circuit has similarly noted that our arbitrary or capricious review of the FCC

is a narrow one; we must affirm the decision if we find that it is not contrary to law, that it is supported by substantial evidence and based upon a consideration of the relevant factors, and if we determine that the conclusions reached have a rational connection to the facts found. *FCC v. National Citizens Comm. for Broadcasting*, 436 U.S. 775, 803, 814-15 (1978); *NAACP v. FCC*, 682 F.2d 993, 997-98 (D.C. Cir. 1982). When, as in this case, "an agency is obliged to make policy judgments where no factual certainties exist or where facts alone do not provide the answer," our role is more limited; we require only that the agency "so state and go on to identify the considerations it found persuasive." *National Ass'n of Regulatory Util. Comm'rs v. FCC*, 737 F.2d 1095, 1140 (D.C. Cir. 1984) ("*NARUC*") (internal quotations omitted), *cert. denied*, 469 U.S. 1227 (1985).

AT&T v. FCC, 832 F.2d 1285, 1291 (D.C. Cir. 1987).

These precedents indicate why the LECs' arguments cannot prevail. Where, as here, the FCC must make judgments about future market behavior with respect to a brand-new technology, certainty is impossible. The Commission must rely (within the limits of reason and rationality) on its expertise and its evaluation of the existing evidence in deciding whether the risk of harm is large and/or important enough to merit regulatory action. Our review for arbitrariness does not demand total assurance on the part of the agency; such a standard would substantially hobble agencies working in new and rapidly developing fields. In this light, it is not unreasonable for the FCC to have drawn guidance from another recent situation in which a local communications monopoly actively set about suppressing the development of a new technology that could foster competition in its market. Similarly, the FCC's prediction that an unaffiliated entity will be

more likely than a LEC to use a LMDS license to compete both in the local telephony and local subscriber video markets is plausibly rooted in the unprecedented size and capacity of a LMDS license and in the unprecedented opportunity to foster competition in the local telephone market that the current window of opportunity may represent.

b. *The LECs' Argument That the FCC Order Cannot be Justified as a Way to Afford Opportunities to Small Providers*

In paragraph 159 of their Order, the FCC Commissioners note that: "Our primary goal in the present proceeding is to encourage efficient competition in the telephony and MVPD markets. We have also expressed a corresponding concern with providing opportunities for smaller operators. These objectives are drawn from the direction given us by Congress." The rest of the Order continues to place the smaller operator rationale in a distinctly secondary status, and the FCC does not highlight it before this court.

In challenging this latter rationale, the LECs rely on the reasoning in *Cincinnati Bell Telephone Co. v. FCC*, 69 F.3d 752 (6th Cir. 1995), a Sixth Circuit case holding that eligibility rules that restricted cellular communications providers from participating in Personal Communications Service ("PCS") auctions were arbitrary because inadequately explained, *see id.* at 756. The *Cincinnati Bell* opinion noted that the eligibility restriction at issue there, like the one in the instant case, permitted incumbent monopolists to acquire new licenses as long as they did so outside of their current geographic service areas, and reasoned that the restriction would therefore do little if anything to stem the accretion of communications giants, while disproportionately hurting smaller providers who would most likely only be financially able to offer new communications services within their existing service area. *Id.* at 764.

Considering the FCC's downplaying of the smaller-provider-based rationale before this court and in its Order, we need not tarry on the argument long. We note, however, that the Sixth Circuit's case involved a different technology

and a different market. The Sixth Circuit had before it only the question of cellular communications provider access to PCS. Moreover, the *Cincinnati Bell* court addressed this question in 1995, a year before Congress passed the 1996 Telecommunications Act, which was intended, *inter alia*, to make the development of competition in the telephony market a more realistic possibility. As indicated above (*see* II.A.1.), the FCC's Order adequately differentiates LMDS from earlier technologies like PCS, and present market conditions from those prevailing before the passage of the 1996 Act. In this light, the Sixth Circuit's opinion gives us no reason to question the reasonableness of the FCC Commissioners' judgment that restricting the power of incumbent local telephone company monopolists to acquire the LMDS license for their existing service area will promote competition. Certainly, it is reasonable to believe that many smaller providers who do not currently hold LEC monopolies will benefit if the FCC's Order prevents the incumbent LECs monopolists from dominating the LMDS market to the exclusion of smaller potential competitors.

We accordingly find that the LECs' challenges to the FCC's Order all fail.

B. *The Rural LEC Petitioners*

The FCC's eligibility restriction applies to rural LECs as well. The rural telephone companies argue that including them in this restriction violates 47 U.S.C. § 309(j)(3)-(4). Section 309(j)(3)(A)-(B) states that, in designing systems of competitive bidding, the FCC "shall seek to promote" a series of objectives, including, *inter alia*, "(A) the development and rapid deployment of new technologies, products, and services for the benefit of the public, *including those residing in rural areas*, without administrative or judicial delays" (emphasis added) and "(B) promoting economic opportunity and competition and ensuring that new and innovative technologies are readily accessible to the American people by avoiding excessive concentration of licenses and by disseminating licenses among a wide variety of applicants, including small businesses, *rural telephone companies*, and businesses owned by

members of minority groups and women" (emphasis added). Section 309(j)(4)(D) provides that "[i]n prescribing regulations pursuant to paragraph (3), the Commission shall ... (D) ensure that small businesses, rural telephone companies, and businesses owned by members of minority groups and women are given the opportunity to participate in the provision of spectrum-based services, and, for such purposes, consider the use of tax certificates, bidding preferences, and other procedures" (emphasis added). We agree that these statutory provisions evidence a particular congressional concern for rural consumers and rural LECs, but find that the FCC's decision to include rural LECs in its three-year eligibility restriction on acquisition of an in-region LMDS license ultimately does not violate section 309(j)(3)-(4).

1. *The Rural LECs' Argument Under Chevron's First Step*

The rural LECs argue, first, that the FCC's inclusion of rural telephone companies in its eligibility restriction contravenes the plain language of section 309(j)(3)-(4) and therefore fails under the first prong of *Chevron, U.S.A., Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837 (1984). This prong of the two-part *Chevron* test asks only "whether Congress has directly spoken to the precise question at issue. If the intent of Congress is clear," of course, "the court, as well as the agency, must give effect to the unambiguously expressed intent of Congress." *Id.* at 842-43. According to the rural LECs, section 309(j)(4)(D) requires the FCC to "ensure" through its auction rules that LMDS licenses are actually disseminated to rural telephone companies, and section 309(j)(3)(B) mandates that rural telephone companies be "given the opportunity to participate in the provision of" LMDS. Joint Brief of Intervenors Rural Telecommunications Group and Independent Alliance in Support of Petitioner National Telephone Cooperative Association, at 8-10 ("Rural LEC Brief"). We cannot see how the plain language or clear meaning of section 309(j) bars the FCC from imposing the eligibility restriction on rural LECs at issue here.

a. *Section 309(j)(3)*

First, keep in mind that section 309(j)(3) grants the FCC the authority to establish eligibility restrictions on communications licenses. *See* 47 U.S.C. § 309(j)(3) ("In identifying classes of licenses and permits to be issued by competitive bidding, *in specifying eligibility and other characteristics of such licenses and permits*, and in designing the methodologies for use under this subsection, the Commission shall include safeguards to protect the public interest in the use of the spectrum and shall seek to promote the purposes specified in section 151 of this title and the following objectives") (emphasis added); *see also Cincinnati Bell*, 69 F.3d at 762 ("A plain reading of Section 309(j)(3)(B), which directs the FCC to promote 'economic opportunity and competition ... by avoiding excessive concentration of licenses and disseminating licenses among a wide variety of applicants,' indicates that Congress clearly conferred authority on the FCC to place restrictions and limitations on the bidding process.").

Second, section 309(j)(3)(B) does not state that rural telephone companies must be "given the opportunity to participate in the provision of" LMDS. Instead, it requires the FCC to "seek to promote" a number of objectives, including "promoting economic opportunity and competition and ensuring that new and innovative technologies are readily accessible to the American people by avoiding excessive concentration of licenses and by disseminating licenses among a wide variety of applicants, including small businesses, rural telephone companies, and businesses owned by members of minority groups and women." This provision is subject to a variety of reasonable interpretations. Most importantly, it articulates a number of potentially conflicting objectives, including both the promotion of competition and the dissemination of licenses to rural telephone companies. "[O]nly the Commission may decide how much precedence particular policies will be granted when several are implicated in a single decision." *Mobiletel, Inc. v. FCC*, 107 F.3d 888, 895 (D.C. Cir. 1997). In this case, the Commission determined that allowing incumbent LECs, including incumbent rural LECs, to participate without restriction in bidding for in-region LMDS licenses would ultimately inhibit the develop-

ment and use of the LMDS spectrum, whereas the FCC's eligibility restriction on rural LECs would "promote economic opportunity and competition, and ... avoid excessive concentration of licenses by disseminating licenses among a wide variety of applicants." Order ¶ 181. In addition, while section 309(j)(3)(B) calls for the wide dissemination of licenses, it lists a number of indications of diversity, rather than confining its concern to rural telephone companies. Moreover, section 309(j)(3)(B) refers to "new and innovative technologies" as a group, indicating that diversity within this group might be enough to meet the statute's requirements even if the licensees for one technology within this group are less diverse. Finally, as we discuss below, the FCC concluded that many rural LECs would actually be able to acquire in-region LMDS licenses under its Order.

b. *Section 309(j)(4)*

Section 309(j)(4)(D) does not state that the FCC must "ensure" through its auction rules that licenses for LMDS, which is a spectrum-based service, are actually disseminated to rural telephone companies. Instead, it insists only that rural telephone companies have "the *opportunity* to participate in the provision of spectrum-based services" and accordingly instructs the FCC to "consider the use of tax certificates, bidding preferences, and other procedures" (emphasis added). The meaning of "opportunity" in the context of section 309(j)(4)(D) is necessarily ambiguous. At the extremes, the term is capable of supporting a range of interpretations extending from the licensee guarantees that the rural LECs advocate to a regime in which there are no guarantees (and perhaps little realistic chance) that rural LECs will actually end the day with access to LMDS. Under the three-year eligibility restriction in issue, a rural LEC does have an "opportunity" to: (a) acquire LMDS licenses immediately in all areas but its existing service area; (b) acquire a LMDS license in its existing service area once three years have passed; (c) bid immediately for a smaller LMDS license (150 megahertz instead of 1,150 megahertz) in its service area; (d) acquire the LMDS license for its service area as long as the

LEC does not provide telephone service to more than ten percent of the population within the basic trading area ("BTA") assigned to each LMDS license; (e) acquire an in-region LMDS license immediately on the condition that the LEC divest its overlapping telephone interests; and (f) seek a waiver of the eligibility restriction, subsequent to the initial award of LMDS licenses, upon a showing of good cause. *See* Order WW 178-80, 188, 160. Moreover, section 309(j)(4)(D), like section 309(j)(3)(B), speaks of "spectrum-based services" as a unit, rather than stating that rural telephone companies must have access to *each* spectrum-based service. Finally, section 309(j)(4)(D) does not mandate that the rural LECs receive preferential treatment in the form of "tax certificates, bidding preferences, and other procedures"; it just instructs the FCC to "consider" that possibility.

In short, we do not believe that the present eligibility restriction violates the text or intent of section 309(j)(3)(B) or section 309(j)(4)(D) so as to violate the first prong of the *Chevron* test.

One of the rural LEC petitioners, the National Telephone Cooperative Association ("NTCA"), also makes a brief argument under *Chevron's* second prong. NTCA contends that the FCC abused its discretion by ignoring section 309(j)'s concern for rural residents and rural LECs, and the 1996 Telecommunications Act's overarching desire to foster competition. This argument is baseless for the reasons elaborated elsewhere in this opinion. The FCC's imposition of the three-year eligibility restriction on rural LECs is fully consistent with a reasonable interpretation of section 309(j), (*see* II.B.1.), and the Commission has clearly explained its basis for believing that this eligibility restriction will foster competition, *see, e.g.,* Order ¶ 162.

2. *The Rural LECs' Argument That Including Them in the Eligibility Restriction Was Arbitrary and Capricious*

The rural telephone companies also argue that the FCC has failed to supply a reasoned basis in the record for its decision to include the rural LECs in the LMDS eligibility restriction. They accordingly contend that the application of

the in-region eligibility restriction to rural telephone companies is arbitrary and capricious, an abuse of discretion, and otherwise contrary to law.

a. *The Claim That the FCC Lacks Support for its Predictions and That the Commission's Actions Fail to Satisfy the FCC's Stated Objectives*

The rural telephone companies engage in the same error that the LECs committed: They assert that the FCC was required to establish "that limiting rural telephone company participation is *necessary* to ensure that rural America receives LMDS at reasonable charges." Rural LEC Brief, at 13-14 (emphasis added). The rural LECs do not locate this requirement in any statute, but instead point to a statement in the FCC's Order that appears in the introduction to the Commission's explanation of its decision to impose an eligibility restriction:

Our overall goal in assessing the need to restrict the opportunity of any class of service providers to obtain and use spectrum to provide communications services has been to determine whether the restriction is a *necessary* step in ensuring that consumers will receive efficient communications services at reasonable charges. Since we are of the view that competitive markets are the most direct and reliable means for ensuring that consumers receive the benefits described in the Communications Act, we have evaluated the need for spectrum licensing restrictions in terms of whether the restrictions are *necessary* to promote competition in the telecommunications marketplace and whether these restrictions are otherwise consistent with our obligation to promote the public interest.

Order ¶ 157 (emphasis added). We believe that the rural LECs have over-read this introductory passage, which speaks in general terms about "any class of service providers," any "communications service," and eligibility restrictions as a category. *Id.* As the FCC's Order makes clear when it begins its detailed discussion of the Commissioners' decision to impose a three-year eligibility restriction on LEC acquisi-

tion of in-region LMDS licenses, the Commission did not conclude—or believe that it needed to conclude—that imposing the eligibility restriction on rural LECs was a necessary, unavoidable step if the Commission was "to ensure that rural America receives LMDS at reasonable charges." Rather, the FCC determined that: "[t]he [last] element of our inquiry is whether eligibility restrictions are the *best* means of achieving our goal of increasing competition in the LEC and MVPD markets. We find that they are" *Id.* ¶ 176 (emphasis added); *see also id.* ¶ 162 ("[W]e find *on balance* that a policy favoring restricted eligibility for a limited time would result in *the greatest likelihood* of increased competition in the local telephony and MVPD markets.") (emphasis added).

The rural LECs also argue that, even if the FCC's Order defends its eligibility restriction as the "best" approach rather than the "necessary" one, the FCC cannot rely on economic theory, its evidence indicating that LECs exercise monopoly power, and its predictive judgment as to the future behavior of markets in deciding to include the incumbent rural LECs in its eligibility restriction. Instead, the rural LECs contend, the FCC had to provide what the rural telephone companies characterize as "supporting data," which would presumably contain more specific and exact factual information. Rural LEC Brief, at 15. *NCCB* and *AT&T* defeat this claim. Both cases recognize that where, as here, the FCC has to establish eligibility criteria based on how it predicts the market and regulated entities will react, "complete factual support in the record for the Commission's judgment or prediction is not possible or required; 'a forecast of the direction in which future public interest lies necessarily involves deductions based on the expert knowledge of the agency.' " *NCCB*, 436 U.S. at 814 (quoting *FPC v. Transcontinental Gas Pipe Line Corp.*, 365 U.S. 1, 29 (1961)). "When, as in this case, 'an agency is obliged to make policy judgments where no factual certainties exist or where facts alone do not provide the answer,' our role is more limited; we require only that the agency 'so state and go on to identify the considerations it found persuasive.' " *AT&T*, 832 F.2d at 1291 (quoting *Na-*

tional Ass'n of Regulatory Util. Comm'rs v. FCC, 737 F.2d 1095, 1140 (D.C. Cir. 1984)).

Here, the FCC acknowledged that absolute certainty was impossible, but presented its reasoning clearly, cogently, and based on the agency's best understanding of the available information. This explanation is too lengthy to present completely here, but the following passage from the Order summarizes many of its essential points:

Based on the record here, standard economic theory, our experience, an analogous situation in the cable TV industry, and our assessment of competitive and regulatory developments in the local telephony and MVPD [Multichannel Video Programming Distributor] markets, we find on balance that a policy favoring restricted eligibility for a limited time would result in the greatest likelihood of increased competition in the local telephony and MVPD markets. By restricting in-region LEC and cable companies, we ensure the entry of a new LMDS operator that could provide competition in the LEC market, the MVPD market, or both. An incumbent, on the other hand, would have a strong incentive to obtain an LMDS license in order to prevent a new entrant from obtaining the license and competing directly in the incumbent's current market. In so doing, such an incumbent will have forestalled market entry by an entity that could provide both telephony and MVPD and will have deprived consumers of an opportunity to choose between a possible two providers in each market and the lower prices for such services that consumer choice necessarily implies. Furthermore, either incumbent would have no incentive to use the LMDS spectrum to provide the service in which it has market power because this could result in lower prices for the service, and lower profits. By temporarily restricting incumbents' eligibility to acquire in-region LMDS licenses, this policy maximizes the likelihood of increasing competition in both the LEC and MVPD markets.

As we have unanimously observed in recent proceedings, both incumbent LECs and cable television firms

currently possess substantial market power. An in-region LMDS license would be valuable to these firms not only because they could use it as other firms would, but also because, by obtaining the license, they could preserve excess profits that an independent LMDS competitor would erode....

....

Our concern regarding LEC and cable eligibility is educated by the substantial record collected in this proceeding on the capabilities of LMDS.... LMDS offers a significant amount of capacity, larger than currently available wireless services.... [W]e believe that the likelihood that LMDS can increase competition in either the local multichannel video or local telephone exchange markets (or both simultaneously) is high and warrants analysis in order to determine whether in-region LEC and cable TV incumbents should be permitted to acquire and hold initial licenses.

While all bidders in an auction for LMDS licenses can be expected to base their bids on their individual assessment of the most efficient use of the spectrum, LECs and cable companies assessing the value of in-region LMDS licenses would have the additional incentive to protect their market power and preserve a stream of future profits.

Order ¶¶ 162-63, 170-71. We find that this explanation is both reasonable and adequate support for the FCC's predictive judgment.

b. *The Claim That the FCC Failed to Consider Record Evidence*

The rural LECs next argue that the FCC's Order failed to address comments in the record from the rural telephone community that contended that an in-region eligibility restriction on rural LECs "would harm the ability of rural telephone companies to provide LMDS in their service areas." Rural LEC Brief, at 17. This argument is somewhat odd. One would naturally expect that an *eligibility restriction* on rural LEC acquisition of in-region LMDS licenses would, by its

very nature, "harm"—to some degree—"the ability of rural telephone companies to provide LMDS in their service areas"; that, in fact, is the restriction's purpose. Indeed, no one, including the FCC, disputes this point, although the FCC has determined for the reasons elaborated below that ultimately the in-region restriction will have a relatively small impact on the rural LECs' ability to participate in the LMDS auction. See Order ¶¶ 179-80. We believe the real question presented here is whether the FCC can exercise its judgment that a restriction on the incumbent rural LECs is merited in order to counteract the rural LECs' present monopoly power. Moreover, while the rural LECs assert that the FCC failed to consider "record evidence," they point to no evidence in the record. Instead, the portions of the record that the rural LECs cite simply assert that the eligibility restriction will harm rural LECs. See Rural LEC Brief, at 17, *citing* Joint Appendix, at 665-67, 672-74, 765-66, 774-76.

The rural LECs go on to cite the Order at paragraph 179 for the proposition that the FCC has established a standard whereby "in order for a rural telephone company to be entitled to an opportunity to participate in a new service, the rural telephone company must first demonstrate that it is the *only* entity that can provide the service [in rural areas]." *Id.* Instead, however, paragraph 179 only rejects the *rural LECs'* contention "that they are the only entities that can provide service in their service territories." It reads:

Commenters from the rural telephone community reason that unless rural telephone companies are able to participate in the LMDS market, consumers in rural areas are likely to be deprived of the benefits of this new service. We agree that it would be undesirable to impair the provision of LMDS service to rural consumers. Although we have decided to impose some short-term restrictions in LECs, including rural telephone companies, we do not believe that these restrictions, as crafted, will hinder the introduction of LMDS in rural areas. Rural LECs have not made the case that they are the

only entities that can provide LMDS in their service territories.

Order ¶ 179.

The rural LECs have mischaracterized the FCC's rationale for its Order and pointed to no record evidence that the Commission failed to consider.

- c. *The Claim That the FCC's Conclusion That the Eligibility Restriction Will Not Compromise Rural Telephone Company Participation in LMDS is Arbitrary and Capricious*

As we indicated above (*see* II.B.2.b.), we have not been able to find (and, for the reasons discussed above, would not expect to find) any statement within the FCC's Order asserting that the eligibility restriction will have *no* negative effect on rural LEC participation in LMDS. Instead, the FCC's Order "conclude[s] that the interests of rural telephone companies are adequately addressed by the LMDS rules we adopt herein," Order ¶ 362, and explains the various opportunities that remain open to rural LECs. We evaluate the specific claims that the rural LECs make about that FCC conclusion in this light.

1. *The Claim That the FCC's Conclusion That Rural Telephone Companies Will Not Trigger the Eligibility Restriction is Arbitrary and Capricious*

The rural LECs take issue with the FCC's determination that "because rural LECs are generally small, they are unlikely to have the degree of overlap with BTAs [basic trading areas] necessary ... to trigger our eligibility restriction." *Id.* ¶ 180. This statement refers to the fact that the FCC's eligibility restriction only applies to a LEC if ten percent or more of the population in the BTA that the desired LMDS license covers is also within the LEC's authorized telephone service area. *See id.* ¶ 188. This determination appears in the FCC's Order as one of several reasons why the FCC concluded that its restriction on rural LECs will not "hinder the introduction of LMDS in rural areas." *Id.* ¶ 179. The rural LECs argue that the FCC's prediction of relatively

modest effects on rural LEC eligibility is arbitrary and capricious because the application of the restriction turns on the overlap between a LMDS license's BTA and a LEC's telephone service area, rather than on the size of a rural LEC. However, it is not difficult to see a logical connection between the FCC's overlap criteria and a rural LEC's size: The smaller a LEC, the less likely it is to be servicing a customer base that constitutes ten percent or more of the population within a BTA, particularly because the BTAs for LMDS licenses, which are quite large, have no necessary correlation to the boundaries of rural telephone companies' service areas. *See id.* ¶¶ 135, 138, 180.

The rural LECs also claim that the FCC's determination is arbitrary and capricious because the FCC did not "conduct an analysis of the actual degree of overlap between LMDS license areas and rural telephone company service areas." Rural LEC Brief, at 19. The rural telephone companies do not claim to have the detailed information that such an analysis covering hundreds of rural LECs would require, or to have offered to collect it for the FCC; they argue, instead, that the FCC should have secured this information during its rulemaking. Given that all the data needed for an overlap analysis presumably exists—the boundaries of the BTAs for LMDS licenses and the current authorized service areas for rural LECs are both established—the FCC might profitably have undertaken such a factual investigation. However, we do not believe that the comprehensive factual analysis that the rural LECs would have liked was actually required of the FCC in this case. The FCC was entitled to conduct, and did conduct, a general analysis based on informed conjecture. Specifically, a BTA is typically constructed around an "urban commercial center," where the population of the BTA will be most concentrated; BTAs are not designed to follow the same lines as rural LEC service areas. Order ¶ 138. BTAs also tend to be quite large: The FCC divided the fifty states into only 487 BTAs. *See id.* ¶ 135. The FCC accordingly drew a reasonable inference from its general knowledge that "rural LECs are generally small," and concluded that rural LECs were "unlikely" to have the necessary overlap, although some

number of rural LECs will presumably meet the overlap requirement's threshold. *Id.* ¶ 180.

In the final analysis, the number of rural LECs that will or will not fall within the ten percent overlap rule was not the determinative issue. The FCC was operating on the premise that if a LEC services a customer base that constitutes more than a small percentage of a BTA, then the risk of impeded competition in the telephony market is great enough to warrant an in-region eligibility bar. The exact percentage of rural LECs covered under a ten percent overlap rule was not the primary question, and the precise identification of that percentage through a detailed and expensive study would not likely have led the FCC to a different conclusion about whether to impose a ten percent overlap rule.

2. *The Claim That the Divestiture Provision Does Not Reduce the Adverse Impact on Rural Telephone Companies*

Under the FCC's Order, a LEC can buy a LMDS license as long as it divests itself of any overlapping service areas or interests within ninety days. *See id.* ¶ 194; *see also id.* ¶ 180. The FCC observed in a footnote that:

Such flexibility should be particularly useful for those rural LECs that may have overlapping ownership interests in a BTA. Although we anticipate that most rural LECs would not have sufficient overlap of their authorized service area with the LMDS service area to be affected by the eligibility restrictions we are adopting, the additional flexibility to divest such overlapping ownership interests should further ameliorate any potential negative impact on these entities.

Id. ¶ 194 n.302. The rural LECs argue that, in fact, this divestiture provision will be "singularly unhelpful" to them "because the areas rural telephone companies have a desire and ability to serve are those within and adjacent to their service area." Rural LEC Brief, at 20.

We do not believe that this claim renders the FCC's decision to include rural LECs in its eligibility restriction

arbitrary or capricious. Some—perhaps even a large—percentage of rural LECs will not find the divestiture provision in the FCC's Order an attractive solution to all their "problems." But that does not mean that the availability of this option does not increase a rural LEC's flexibility, nor does it mean that the divestiture provision will not help some rural LECs. And we see no evidence that the FCC is claiming more for its divestiture provision than that.

3. *The Claim That the FCC's Conclusion That Geographic Partitioning Will Ensure the Dissemination of Licenses to Rural Telephone Companies is Arbitrary and Capricious*

One of the reasons that the FCC cited in support of its conclusion that its eligibility restriction will not impede the introduction of LMDS in rural areas was that

to the extent any LEC is unsuccessful in the LMDS auction, it will still have the opportunity to participate—subject to the eligibility rules—by either acquiring spectrum from an LMDS licensee through the partitioning and disaggregation rules we are adopting, or by contracting (in a way that does not circumvent any applicable ownership and control requirements and does not raise competitive concerns) with the LMDS licensee to provide service in its telephone market area.

Order ¶ 180. The rural LECs argue that the FCC's partitioning rules are "effectively ... useless" for rural LECs because if the customer base of a rural LEC constitutes more than ten percent of the population in a BTA, partitioning the BTA will not enable the LEC to avoid the FCC's ten percent overlap rule. Rural LEC Brief, at 21. We agree that the partitioning rules would be more useful to rural LECs seeking to offer in-region LMDS service if they provided a means to circumvent the ten percent overlap rule. However, that is not the purpose of the partitioning rules. Rather, the FCC intended for its partitioning rules to help rural LECs by making ownership of a LMDS service more affordable. With the assistance of these rules, a rural LEC seeking to provide

LMDS service does not have to garner sufficient capital to purchase and then effectively utilize an entire LMDS license; instead, a rural LEC can buy or lease part of a LMDS license from its original owner. See Order ¶ 141 ("We determined that the issue of geographic partitioning should be considered to enable LMDS licensees to recoup some of their initial licensing and construction costs, while providing a method for entities with specific local concerns or insufficient capital to purchase rights for the entire service area, to acquire a portion of the geographic area originally licensed."); *id.* ¶ 145 ("[T]he nature of the LMDS cell structure makes disaggregation and partitioning powerful tools for licensees to concentrate on core areas or to deliver services to isolated complexes, such as rural towns or university campuses, that do not lie within major market areas. We further believe that disaggregation and partitioning will provide opportunities for small businesses seeking to enter the MVPD and local telephony marketplaces."); *id.* ¶ 362 ("[T]he degree of flexibility we will afford in the use of this spectrum, including provisions for partitioning or disaggregating spectrum, should assist in satisfying the spectrum needs of rural telephone companies at low cost."). We find the FCC's conclusion, that its partitioning rules will help rural LECs acquire LMDS licenses by making smaller, more affordable licenses potentially available, reasonable.

The rural LECs go on to assert that only six partitioning deals have thus far been consummated in auction-licensed services and argue, citing a trade periodical, that licensees are reluctant to enter into partitioning agreements with small and/or rural entities due to transaction costs and the difficulty of earning a profit. We reject this argument on two grounds. First, the FCC's partitioning rules at issue here govern the implementation of a new technology in a brand-new market. These are the precise sorts of circumstances in which the Commission's predictive judgment demands great deference, *see NCCB*, 436 U.S. at 813-14; *AT&T*, 832 F.2d at 1291, and in this case the FCC's Order explains the technologically-based reasons for the Commission's conclusion that partitioning will be an attractive option for LMDS licensees. The

Order, for instance, "observ[es] that continued technological improvements may reduce the amount of spectrum required to provide a full range of services." Order ¶ 140. The Order also cites with approval comments in the record "contend[ing] that the relatively high cost of LMDS construction and the shorter transmission paths it provides, in addition to the limitation of service to consumers within reach of cell transmitters, lend support for the Commission's proposals with regard to geographic partitioning." *Id.* ¶ 143. Second, even if rural LECs will encounter difficulties in finding parties willing to contract with them for part of a LMDS license, we do not believe that this would make it arbitrary or capricious for the FCC to list its partitioning rules as one of the actions it is taking to promote LMDS service in rural areas.

3. *The Argument That the Application of the In-Region Eligibility Restriction to Rural Telephone Companies Hinders the Rapid Deployment of LMDS to Rural America and is Arbitrary and Capricious*

a. *The Claim That There is No Evidence to Support the FCC's Conclusion That Competitive Forces Will Ensure the Provision of LMDS to Rural America*

The rural LECs challenge the FCC's statement that "we do not believe that these [eligibility] restrictions, as crafted, will hinder the introduction of LMDS in rural areas.... [I]f it is profitable to provide service in rural areas, a licensee should be willing to do so, either directly or by partitioning the license and allowing another firm to provide service." *Id.* ¶¶ 179-80. The rural LECs argue that such reliance on the market is "outrageous" in this context because, historically, rural areas have not attracted many potential competitors. Rural LEC Brief, at 25. Although the rural LECs do not assert that they will be able to provide LMDS service in rural areas at less expense than other possible providers, they claim that they have a natural interest in providing additional communications services in rural areas where they are already operating.

We do not find this argument persuasive. First, in making a predictive judgment about the future operation of the

brand-new market in LMDS, the FCC is entitled to a very substantial measure of deference and is clearly not required to rely on the history of other markets in other technologies. *See NCCB*, 436 U.S. at 813-14; *AT&T*, 832 F.2d at 1291. Second, the rural LECs have not indicated why they would be able to provide LMDS in rural markets if provision of that service would in fact be unprofitable. They have presented no evidence and made no argument, for instance, that they would be able to provide LMDS in rural areas at less expense than potential competitors would incur. In this light, it seems perfectly sound—indeed commonsensical—for the FCC to conclude that the rural LECs can only want increased access to the rural LMDS market precisely because they think that this market will be profitable (or possibly because they want to protect their telephone monopolies).

b. *The Claim That the FCC Gave No Consideration to the Universal Service Principles Set Forth in Sections 309(j)(3)(A) and 254(b)(3) When It Imposed the Eligibility Restriction on Rural Telephone Companies*

47 U.S.C. § 309(j)(3)(A) provides that the FCC "shall seek to promote," *inter alia*, "the development and rapid deployment of new technologies, products, and services for the benefit of the public, *including those residing in rural areas*, without administrative or judicial delays" (emphasis added). 47 U.S.C. § 254(b)(3) provides that:

Consumers in all regions of the Nation, including low-income consumers and *those in rural, insular, and high cost areas*, should have access to telecommunications and information services, including interexchange services and advanced telecommunications and information services, that are reasonably comparable to those services provided in urban areas and that are available at rates that are reasonably comparable to rates charged for similar services in urban areas.

(emphasis added).

We believe that the rural LECs err in their claim that the FCC's Order does not adequately consider the universal

service principles set forth in these sections. To be sure, the FCC's Order does not address this issue by name; its explicit reference to the universal service goals in the context of providing LMDS to rural areas is limited to a paragraph. See Order ¶ 271 & n.403. But the Order does make clear that the FCC did consider the substance of the universal service issue. As a key passage of the Order on rural LECs explains, the FCC Commissioners "agree[d] that it would be undesirable to impair the provision of LMDS service to rural customers." *Id.* ¶ 179. The Commissioners concluded, however, that the Order's eligibility restriction would not in fact "hinder the introduction of LMDS in rural areas" for the series of reasons discussed throughout this section. *Id.* In this light, the rural LECs' argument devolves into a rehashing of the contention, rejected above, that the FCC was arbitrary or capricious in disagreeing with the rural LECs' claim that the eligibility restriction will leave rural areas without LMDS service.

c. *The Claim That the FCC's Performance Requirements When Coupled With the Eligibility Restriction Mean That Rural America Will Not Receive LMDS in Direct Violation of Section 309(j)(4)(B)*

47 U.S.C. § 309(j)(4)(B) states that "the Commission shall"

include performance requirements, such as appropriate deadlines and penalties for performance failures, *to ensure prompt delivery of service to rural areas*, to prevent stockpiling or warehousing of spectrum by licensees or permittees, and to promote investment in and rapid deployment of new technologies and services.

(emphasis added). In its Order, the FCC decided to

adopt very flexible build-out requirements for LMDS. Specifically, we will require licensees to provide "substantial service" to their service area within 10 years. Although LMDS licensees will have incentives to construct facilities to meet the service demands in their licensed service area, we believe that minimum construction requirements can promote efficient use of the spec-

trum, encourage the provision of service to rural, remote, and insular areas, and prevent the warehousing of spectrum.

....

... [F]or an LMDS licensee that chooses to offer point-to-multipoint services, a demonstration of coverage to 20 percent of the population of its licensed service area at the 10-year mark would constitute substantial service.

Order ¶¶ 266, 270. The Order went on to state that:

We believe that these build-out provisions fulfill our obligations under Section 309(j)(4)(B). We also believe that the auction and service rules which we are adopting for LMDS, together with our overall competition and universal service policies, constitute effective safeguards and performance requirements for LMDS licensing. Because a license will be assigned in the first instance through competitive bidding, it will be assigned efficiently to a firm that has shown by its willingness to pay market value its willingness to put the license to its best use. We also believe that service to rural areas will be promoted by our proposal to allow partitioning and disaggregation of LMDS spectrum.

Id. ¶ 271.

The rural LECs argue that these relatively undemanding performance requirements, together with the eligibility restriction on rural LECs, will hinder the delivery of LMDS to rural areas. In their view, LMDS licensees offering point-to-multipoint services will meet the requirement that they cover twenty percent of the population in their licensed service areas within ten years by serving urban areas and avoiding rural ones; once the licensees' build-out benchmarks are met, the rural LECs continue, the licensees will lack any incentive (given the high transaction and other costs associated with serving sparsely populated regions) to negotiate partitioning agreements with businesses seeking to serve rural areas. This is not an implausible scenario. However, it does not

render the Commission's alternate predictive judgment unreasonable.

The FCC concluded, based on its prior analogous experience with Wireless Communications Services ("WCS"), that strict build-out requirements might discourage the acquisition of LMDS licenses, given the wide variety of services that LMDS can potentially support and the substantial uncertainties that presently exist as to the best uses for LMDS. *See id.* ¶ 267. In light of this danger, the Commission decided to adopt liberal build-out requirements.

We agree that this decision is a reasonable interpretation of section 309(j)(4)(B), a provision that endorses three different, and potentially competing, goals. First, the FCC's reasoning was clearly in accord with section 309(j)(4)(B)'s concern that the agency "promote investment in and rapid deployment of new technologies and services." 47 U.S.C. § 309(j)(4)(B). Moreover, if strict build-out requirements pose a threat to the rapid development of the LMDS spectrum, that danger will also threaten section 309(j)(4)(B)'s goal of "ensur[ing] prompt delivery of service to rural areas." *Id.* As for section 309(j)(4)(B)'s third goal, "prevent[ing] stockpiling or warehousing of spectrum by licensees or permittees," *id.*, the FCC Commissioners decided, in their expert judgment, that this danger did not loom large enough to mandate stricter build-out requirements. They also expressly "reserve[d] the right to review our liberal construction requirements in the future if we receive complaints related to Section 309(j)(4)(B), or if our own monitoring initiatives or investigations indicate that a reassessment is warranted." Order ¶ 272.

C. *The Waiver Applicant Petitioners*

The waiver applicant petitioners seek review of the FCC's decision, released on January 8, 1993, while the Commission was devising its current LMDS regime, that denied them waivers of the rules that formerly governed use of the spectrum now designated for LMDS. *See* first NPRM ¶¶ 51-53. The rejected waiver applicants filed petitions with the FCC for reconsideration on February 8, 1993. Concurrently, the rejected applicants filed petitions for review with this

court. See Brief of Petitioners James L. Melcher, *et al.*, at 3; Order ¶ 385 n.595. On April 15, 1993, this court ordered those latter petitions held in abeyance pending completion of the FCC proceeding. On March 13, 1997, the FCC denied the rejected applicants' petitions for reconsideration. See Order ¶¶ 383-406. Many of the rejected applicants did not then file timely new appeals with this court. However, at least two rejected applicants, Celltel Communications Corporation ("Celltel") and CT Communications Corporation ("CT"), who had dismissed their petitions for reconsideration that were before the FCC, filed timely new petitions for review with this court on August 11, 1997. This court consolidated these two petitions into the present case on September 8, 1997.

The FCC argues that *TeleSTAR, Inc. v. FCC*, 888 F.2d 132 (D.C. Cir. 1989) (per curiam), and *Wade v. FCC*, 986 F.2d 1433 (D.C. Cir. 1993) (per curiam), establish that the filing of a petition for reconsideration before the FCC makes the challenged FCC order nonfinal, and therefore nonreviewable by this court, as to the petitioning party.³ The Commission asserts that the rejected waiver applicants' petitions for review before this court should accordingly be dismissed as incurably premature. We agree that the petitions before this court from large numbers of the rejected waiver applicants raise serious prematurity problems. *TeleSTAR, Inc.* considered the precise question of "whether a petition for review, unripe because of the pendency of a request for agency reconsideration, ripens so as to vest this court with jurisdiction once the agency issues its final decision on reconsideration." *TeleSTAR, Inc.*, 888 F.2d at 133. It held "that this court does not have jurisdiction to consider the prematurely-filed petition for review, even after the agency rules on the rehearing request. In order to obtain review of a now-final agency order, a new petition for review must be filed." *Id.* As the court explained:

³ In addition, the rejected waiver applicants themselves concede that nearly every issue raised in this appeal was not raised before the agency.

While final agency action can ripen an issue for appellate review, the filing of a challenge to agency action before the agency has issued its decision on reconsideration is incurably premature. We hold therefore that when a petition for review is filed before the challenged action is final and thus ripe for review, subsequent action by the agency on a motion for reconsideration does not ripen the petition for review or secure appellate jurisdiction. To cure the defect, the challenging party must file a new notice of appeal or petition for review from the now-final agency order. We develop this bright line test to discourage the filing of petitions for review until after the agency completes the reconsideration process. If a party determines to seek reconsideration of an agency ruling, it is a pointless waste of judicial energy for the court to process any petition for review before the agency has acted on the request for reconsideration.

Id. at 134 (citation omitted); *see also Wade*, 986 F.2d at 1434 ("The danger of wasted judicial effort that attends the simultaneous exercise of judicial and agency jurisdiction arises whether a party seeks agency reconsideration before, simultaneous with, or after filing an appeal or petition for judicial review.") (citation omitted).

However, we do reach the merits of the petitions before this court from Celltel and CT, who have presented petitions that were not premature.

This court held in *Turro v. FCC*, 859 F.2d 1498 (D.C. Cir. 1988), that:

Our standard for reviewing the FCC's denial of a request for waiver of an agency rule is very deferential. As we stated in *WAIT Radio v. FCC*, 459 F.2d 1203, 1207 (D.C. Cir.), "An applicant for waiver faces a high hurdle even at the starting gate. On its appeal to this court, the burden on [the petitioner] is even heavier. It must show that the Commission's reasons for declining to grant the waiver were so insubstantial as to render that denial an abuse of discretion."

Id. at 1499 (citations omitted); *see also Orange Park Florida T.V., Inc. v. FCC*, 811 F.2d 664, 669 (D.C. Cir. 1987) ("[I]t is elementary that the judiciary may disturb a Commission refusal to waive its rules only in the event of an abuse of discretion."). In *Turro*, the FCC had "concluded that it was preferable to address the policy concerns raised by Turro in a rulemaking proceeding and not in the context of an ad hoc waiver proceeding." *Turro*, 859 F.2d at 1500. The court found that "[t]his decision to proceed by rulemaking is entitled to considerable deference." *Id.*

In this case, the FCC had received hundreds of waiver requests—971 in total—seeking authority to provide point-to-multipoint services on the 28 GHz band, rather than the point-to-point services then-authorized. *See* first NPRM ¶¶ 51-53. The FCC also had pending before it three petitions for rulemaking, two supporting the designation of the 28 GHz band for point-to-multipoint services, and one opposing such a designation. *See id.* ¶¶ 1-13. The Commission denied the waiver requests as a group and proceeded instead with notice and comment rulemaking on the use of the spectrum at issue. As the FCC explained, it had concluded, based on the number of waiver applications and the size of their requests for spectrum space, that granting the waivers would result in a *de facto* reassignment of the 28 GHz band—a band that other parties wanted to use for different, incompatible purposes. *See id.* WW 51-53; Order ¶ 388. Moreover, the Commission found that the waivers raised common policy questions, involving both the best use of the 28 GHz band and the additional rules that would be needed to govern new uses of that band, questions that would best be addressed in a rulemaking proceeding. *See* Order ¶¶ 389, 402-04, 406.

The FCC's reasoning in this regard was not only rational, but highly sound. The 971 waiver applicants were essentially seeking to use the waiver process as a means of getting the 28 GHz band reassigned. Their petitions raised systemic issues most appropriately considered in a rulemaking proceeding that offered all interested parties the opportunity to comment and gave the agency the opportunity to proceed in a more thorough and fair manner. *See National Small Ship-*

ments Traffic Conference, Inc. v. ICC, 725 F.2d 1442, 1447-48 (D.C. Cir. 1984) ("Notice-and-comment procedures ... are especially suited to determining legislative facts and policy of general, prospective applicability.").

Moreover, the FCC has adequately distinguished its earlier decision, in January 1991, to grant a waiver permitting Hye Crest Management, Inc. to provide point-to-multipoint service on the 28 GHz band. When Hye Crest applied for a waiver, it was the only such applicant. Its proposal was unique and untried. The FCC determined that, "under the circumstances of this proceeding," a formal rulemaking to consider changing the designation of the 28 GHz band was "premature" and that a waiver should be granted as the most efficient way to introduce point-to-multipoint service into New York City (the area in which Hye Crest sought to operate). *In re Application of Hye Crest Management, Inc.*, 6 F.C.C.R. 332, at ¶ 18 (released Jan. 18, 1991). The Commission concluded that "grant of the waiver request does not establish a precedent that will ultimately lead to the *de facto* reallocation of the 28 GHz band" and stated that it "[did] not anticipate that our action today will result in an onslaught of waiver requests." *Id.* ¶ 19. The FCC also observed that "[s]hould the proposal prove to be a success and the public benefits anticipated become a reality, a general investigation into alternate uses of the 28 GHz band would then be appropriate for consideration." *Id.* ¶ 18. In contrast, by the time that the FCC acted on the instant waiver applications, a number of manufacturers had begun developing equipment to offer point-to-multipoint services on the 28 GHz band and the agency had received almost a thousand requests for waivers to use the band for that purpose—so many that granting them all would have amounted "to a *de facto* reallocation of the 28 GHz band." First NPRM ¶¶ 51-53. To be sure, some of those rejected waiver applicants had filed their applications for waiver as early as 1991, in the early days of what was to become a deluge of requests. But this court has held that the filing of a waiver application does not create a legal interest that restricts the discretion vested in the FCC or compels the agency to review the request as if no time had passed or

circumstances changed since the moment the request was filed. *See Chadmoore Communications, Inc. v. FCC*, 113 F.3d 235, 241 (D.C. Cir. 1997) (citing *Hispanic Info. & Telecomms. Network v. FCC*, 865 F.2d 1289, 1294-95 (D.C. Cir. 1989); *Schraier v. Hickel*, 419 F.2d 663, 667 (D.C. Cir. 1969)). By the time the FCC acted in this case, the circumstances that the FCC had expressly believed would not develop when it granted Hye Crest's waiver had in fact come to pass, so that the agency's reasons for granting the earlier waiver no longer applied.

CONCLUSION

We accordingly deny the petitions for review from all of the petitioners in this case.