

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Satellite Delivery of Network Signals)	CS Docket No. 98-201
to Unserved Households for)	RM No. 9335
Purposes of the Satellite Home)	RM No. 9345
Viewer Act)	
)	
Part 73 Definition and Measurement)	
of Signals of Grade B Intensity)	

NOTICE OF PROPOSED RULE MAKING

Adopted: November 17, 1998

Released: November 17, 1998

Comment Date: December 11, 1998

Reply Comment Date: December 21, 1998

By the Commission:

TABLE OF CONTENTS

	Paragraph
I. INTRODUCTION	1
A. The Satellite Home Viewer Act	2
B. Grade B Contours and Signal Intensity	4
C. The PrimeTime 24 Lawsuits	6
D. The NRTC and EchoStar Petitions	9
II. ANALYSIS AND REQUEST FOR COMMENTS	15
A. Commission's Authority to Proceed	18
B. Definition, Prediction, and Measurement Proposals	26
1. Defining a Signal of Grade B Intensity	27
2. Predicting a Signal of Grade B Intensity	29
3. Testing for Signal Intensity at Individual Household	37
C. Other Issues	41
III. PROCEDURAL MATTERS	44

Appendix A: Initial Regulatory Flexibility Act Analysis

I. INTRODUCTION

1. In this proceeding we respond to petitions for rulemaking filed by the National Rural Telecommunications Cooperative (NRTC) and EchoStar Communications Corporation (EchoStar). The petitions address the methods for determining whether a household is "unserved" by local network affiliated television broadcast stations for purposes of the 1988 Satellite Home Viewer Act (SHVA).¹ The Commission has placed both petitions on public notice and has received comments on them.²

A. The Satellite Home Viewer Act

2. In the Satellite Home Viewer Act, Congress granted a limited exception to the exclusive programming copyrights enjoyed by television networks and their affiliates because it recognized that some households are unable to receive network station signals over the air.³ The exception is a narrow compulsory copyright license that direct-to-home (DTH) satellite video providers⁴ may use for retransmitting signals of a

¹17 U.S.C. § 119 (1998).

² The NRTC petition was filed July 8, 1998 and placed on public notice on August 5, 1998. The EchoStar petition was filed August 18, 1998 and placed on public notice on August 26, 1998.

³H.R. Rep. No. 103-703, at 5 (1994) (Congress enacted the SHVA so that "households that cannot receive over-the-air broadcasts or cable can be supplied with television programming via home satellite dishes"); S. Rep. No. 103-407, at 5 n.2 (1994) (the restriction on satellite delivery of network signals "actually refers to those geographic areas where subscribers are unable to receive the signal of a particular network"); H.R. Rep. No. 100-187(I), at 14-15, 18, 26, *reprinted in* 1988 U.S.C.C.A.N. 5638 (1988) ("The distribution of network signals is restricted to unserved households; that is, those that are unable to receive an adequate over-the-air signal.").

⁴ More specifically, the license is available to satellite carriers defined as follows:

The term "satellite carrier" means an entity that uses the facilities of a satellite or satellite service licensed by the Federal Communications Commission and operates in the Fixed-Satellite Service under part 25 of title 47 of the Code of Federal Regulations or the Direct Broadcast Satellite Service under part 100 of title 47 of the Code of Federal Regulations, to establish and operate a channel of communications for point-to-multipoint distribution of television station signals, and that owns or leases a capacity or service on a satellite in order to provide such point-to-multipoint distribution, except to the extent that such entity provides such distribution pursuant to tariff under the Communications Act of 1934, other than for private home viewing.

defined class of television network stations⁵ "to persons who reside in unserved households."⁶ The term "unserved household," with respect to a particular television network station is defined by SHVA to mean a household that --

"(A) cannot receive, through the use of a conventional outdoor rooftop receiving antenna, an over-the-air signal of grade B intensity (as defined by the Federal Communications Commission) of a primary network station affiliated with that network, and

(B) has not, within 90 days before the date on which that household subscribes, either initially or on renewal, to receive secondary transmissions by a satellite carrier of a network station affiliated with that network, subscribed to a cable system that provides the signal of a primary network station affiliated with that network."⁷

In any action brought under the SHVA, the law specifies that "the satellite carrier shall have the burden of proving that its secondary transmission of a primary transmission by a network station is for private home viewing to an unserved household."⁸

3. The network station compulsory copyright licenses created by the Satellite Home Viewer Act are limited because Congress recognized the importance that the network-affiliate relationship plays in delivering free, over-the-air broadcasts to American families,⁹ and because of the value of localism in broadcasting.¹⁰ Localism, a principle underlying the broadcast service since the Radio Act of 1927,¹¹ serves the public interest by making available to local citizens information of interest to the local community (*e.g.*, local news, information on local weather, and information on community events). Congress was concerned that

⁵Under 17 U.S.C. § 119(d)(2), the term "network station" means:

(A) a television broadcast station, including any translator station or terrestrial satellite station that rebroadcasts all or substantially all of the programming broadcast by a network station, that is owned or operated by, or affiliated with, one or more of the television networks in the United States which offer an interconnected program service on a regular basis for 15 or more hours per week to at least 25 of its affiliated television licensees in 10 or more States; or

(B) a noncommercial educational broadcast station (as defined in section 397 of the Communications Act of 1934).

⁶The SHVA also contains a "superstation" compulsory copyright license with no geographic restrictions. 17 U.S.C. §§ 119(a)(1) and (d)(9).

⁷17 U.S.C. § 119(d)(10).

⁸17 U.S.C. § 119(a)(5)(D).

⁹See H.R. Rep. 100-887(II), at 26-28 (1988), *reprinted in* 1988 U.S.C.C.A.N. 5577.

¹⁰H.R. Rep. 100-887(I), at 19-20.

¹¹See, Radio Act of 1927, § 9, Pub. L. No. 632, (current version at 47 U.S.C. § 307(b) (1997)).

without copyright protection, the economic viability of local stations, specifically those affiliated with national broadcast networks, might be jeopardized, thus undermining one important source of local information.¹²

B. Grade B Contours and Signal Intensity

4. The Grade B intensity standard is a Commission-defined measure of the strength of a television station's broadcast signal.¹³ Developed in the 1950s, the Commission has used the Grade B standard for a variety of purposes, many of which were not envisioned at the time it was adopted.¹⁴ Significantly, while the Commission anticipated that the Grade B standard might be used generally to determine the service area, or contour, of a television station, use of the standard to identify individual unserved households under SHVA was not then at issue. Grade B represents the field strength of a signal 30 feet above ground that is strong enough, in the absence of man-made noise or interference from other stations, to provide a television picture that the median observer would classify as "acceptable" using a receiving installation (antenna, transmission line, and receiver) typical of outlying or near-fringe areas.¹⁵ The Grade B contour is defined as the set of points along which the best 50% of the locations should get an acceptable picture at least 90% of the time.¹⁶

¹²For a comprehensive discussion of issues raised by the compulsory copyright licensing process in general and the Satellite Home Viewer Act in particular, see Report of the Register of Copyrights, "A Review of the Copyright Licensing Regimes Covering Retransmission of Broadcast Signals" (August 1, 1997).

¹³There are also Grade A and "city grade" standards, which represents stronger signals. Therefore, the Grade A contour and city grade coverage are generally found closer to a station's transmitter. See 47 C.F.R. §§ 73.683 and 73.685.

¹⁴For example, qualified local noncommercial educational television stations are defined for must carry purposes as those stations whose Grade B service contour encompasses the cable system's principal headend, as defined in section 73.683(a), as in effect on March 29, 1990 or any successor regulations. 47 U.S.C. § 535(1)(2)(B). See also, 47 U.S.C. § 522(11) (defining Grade B contour in connection with cable regulations as computed in accordance with regulations promulgated by the Commission); 15 C.F.R. § 2301.4(b)(3)(ii) (in connection with NTIA broadcast applications, source of public telecommunications signal is distant when beyond the grade B contour of origination facility); 47 C.F.R. §§ 22.657(d)-(g) (in connection with distance separation requirements for public mobile operations to reduce interference with television stations at the grade B contour, which is defined for this purpose as a circle with a 55 mile radius, centered on the protected television station location and along which the median television field strength is 64 dBμV/m).

¹⁵See O'Connor, Robert A., "Understanding Television's Grade A and Grade B Service Contours," IEEE Transactions on Broadcasting, 139 (December 1968). The median observer is not the "average" observer; rather, it is the middle observer, or the 50th observer out of 100.

¹⁶The "time variability" planning factor used in the determination of the Grade B standard may create some confusion. In the TV & Cable Factbook, TV Stations Volume (1998 edition page A-15), the Grade B is described as providing service to 50% of locations 90% of the time. The Commission's *Sixth Report and Order* in Dockets 8736 et al. 41 FCC 148, 177 (1952), which adopted the initial television station allocation rules, states, "In the case of Grade B service the figures are 90 percent of the time and 50 percent of the locations." See also, Third Notice of Further Proposed Rule Making, FCC Report 51-144, 16 Fed. Reg. 3072, Appendices A and B (1951); O'Connor, Robert A., "Understanding Television's Grade A and Grade B Service Contours," at 137. Both the broadcast and satellite parties state the time variability factor differently than above. They describe the field strength at the Grade B contour as being available to at least 50% of the locations at least 50% of the time. This apparent inconsistency arises from an adjustment the Commission adopted for the Grade B signal strength values when it originally established them. This

5. The Grade B contour values (which represent the required field strength in dB above one micro-volt per meter) are defined for each television channel in Section 73.683 of the Commission's rules:

Channels 2-6 47 dBu
Channels 7-13 56 dBu
Channels 14-69 64 dBu

Section 73.684 contains the Commission's "traditional" methodology for predicting station service coverage and Section 73.686 describes a procedure for making field strength measurements.

C. The PrimeTime 24 Lawsuits

6. This proceeding was precipitated by petitions for rulemaking filed following the decisions of the United States District Court for the Southern District of Florida in *CBS, Inc. et al. v. PrimeTime 24 Joint Venture*.¹⁷ In that litigation, the plaintiffs -- CBS Inc.; Fox Broadcasting Co.; CBS Television Affiliates Association; Post-Newsweek Stations Florida, Inc.; KPAX Communications, Inc.; LWVI Broadcasting, Inc.; and Retlaw Enterprises -- brought a copyright infringement action against PrimeTime 24, a satellite carrier, for retransmitting distant network programming to satellite dish owners in violation of the SHVA. The plaintiffs alleged that PrimeTime 24 distributed the signals of distant network-affiliated television broadcast stations by satellite to subscribers that were not "unserved households" within the meaning of the SHVA. Finding evidence that violations of the Act had taken place, the court issued a preliminary, nationwide injunction ordering PrimeTime 24 not to deliver CBS or Fox television network programming to any customer that does not live in an unserved household. It was specifically enjoined from providing CBS or Fox network programming:

to any customer within an area shown on Longley-Rice propagation maps, created using Longley-Rice Version 1.2.2 in the manner specified by the Federal Communications Commission ("FCC"),¹⁸ as receiving a signal of at least grade B intensity of a CBS or Fox primary network station, without first either (i) obtaining the written consent of the CBS or Fox station affiliated or the relevant network, or (ii) after giving 15 business days written advance notice to the stations of its intention to conduct a test and of the time and place at which the test will be conducted, providing the station with a signal strength test at the

adjustment results in a Grade B value that predicts reception of an acceptable picture 90% of the time. For example, on channels 2-6, a signal strength of 41 dBu is needed for an acceptable picture. In order for this signal strength to be available 90% of the time, the median or F(50,50) field strength is set at 47 dBu.

¹⁷*CBS, Inc. et al. v. PrimeTime 24 Joint Venture*, Order Affirming in Part and Reversing in Part Magistrate Judge Johnson's Report and Recommendations, 9 F.Supp.2d 1333 (S.D. FL., May 13, 1998) ("*CBS v. PrimeTime 24*, Order"); *CBS, Inc. et al. v. PrimeTime 24 Joint Venture*, Supplemental Order Granting Plaintiffs' Motion for Preliminary Injunction (S.D. FL., July 10, 1998) (No. 96-3650-CIV) ("*CBS v. PrimeTime 24*, Supplemental Order").

¹⁸For an explanation of the Longley-Rice methodology for predicting signal strength, see ¶ 34.

customer's household showing that the household cannot receive a signal of grade B intensity.¹⁹

7. The court initially provided PrimeTime 24 with 90 days to comply with the preliminary injunction, which applies only to subscribers who signed up with PrimeTime 24 after March 11, 1997 (the day the plaintiffs filed their lawsuit). The parties subsequently and jointly agreed to an extension of the compliance date to February 28, 1999, and the court approved the parties' agreement on October 6, 1998. If enforced, the preliminary injunction could result in the termination of network signals to an estimated 700,000 to one million subscribers.²⁰ A permanent injunction could end satellite network service to as many as 2.2 million subscribers.²¹

8. On July 16, 1998, a Raleigh, North Carolina, federal district court ruled against PrimeTime 24 in a similar lawsuit brought by the local ABC affiliate.²² A permanent injunction followed on August 19, 1998.²³ Similar to the Miami ruling, the court found that the SHVA defines unserved household and Grade B using strictly objective standards. The court stated, "PrimeTime's screening procedures have systematically substituted a subjective inquiry into the quality of the picture on a potential subscriber's television set for any signal strength showing. PrimeTime has ignored or turned a blind eye to the necessity of objective signal strength testing and thus willfully or repeatedly provides network programming to subscribers under SHVA."²⁴ In contrast to the Miami ruling, the Raleigh court did not use the Longley-Rice predictive model to identify the affected subscribers, but applied the injunction to all subscribers living within 75-miles of the affiliate's transmitting tower.²⁵ PrimeTime 24 has provided network services to as many as 35,000 households in the

¹⁹The court ruled that the signal strength test at individual households within a station's predicted Longley-Rice contour should be "conducted in accordance with the procedures outlined in the Declaration of Jules Cohen, filed on March 11, 1997." *See infra* at note 76.

²⁰Letter from William E. Kennard, Chairman, Federal Communications Commission, to Senator John McCain and Representative Tom Bliley, September 4, 1998 (figures based on publicly available information).

²¹*Id.* As noted, the court chose the preliminary injunction's March 11, 1997 date because that is when CBS and Fox filed their lawsuit against PrimeTime 24. If the court issues a permanent injunction, the 700,000 to one million subscribers affected by the preliminary injunction will increase to include PrimeTime 24's subscribers before March 11, 1997. This would be an additional 1.5 million subscribers, thus raising the total subscribers affected by the Miami court orders to 2.2 million.

²²*ABC, Inc. v. PrimeTime 24, Joint Venture*, __ F.Supp.2d __, 1998 WL 544286 (M.D. N.C., July 16, 1998) (Case No. Civ. A. 1:97CV00090) ("*ABC v. PrimeTime 24*, Court Opinion").

²³*ABC, Inc. v. PrimeTime 24, Joint Venture*, __ F.Supp.2d __, 1998 WL 544297 (M.D. N.C., Aug. 19, 1998) (Case No. Civ. A. 1:97CV00090) ("*ABC v. PrimeTime 24*, Permanent Injunction").

²⁴1998 WL 544297, *2.

²⁵For an explanation of the Longley-Rice model, see ¶ 34.

ABC affiliate's Raleigh/Durham market.²⁶ At the time of the court's decision, PrimeTime 24 continued to serve more than 9,000 subscribers within the affiliate's Grade B contour.²⁷

D. The NRTC and EchoStar Petitions

9. In response to the Miami court case, the NRTC and EchoStar filed their petitions. We address both Petitions in this rulemaking because the issues are similar and for reasons of administrative efficiency. The NRTC, a distributor of DirecTV DBS service, has asked the Commission to adopt, exclusively for purposes of interpreting the SHVA, a new definition of "unserved" that includes all households located outside a Grade B contour encompassing a geographic area in which 100 percent of the population receives over-the-air coverage by network affiliates 100 percent of the time using readily available, affordable receiving equipment. EchoStar, which is a provider of DBS service, urges the Commission to adopt a prediction model to locate unserved households. EchoStar endorses a model that predicts an area where 99 percent of households receive a Grade B signal 99 percent of the time with a 99 percent confidence level. EchoStar also urges adoption of a methodology for measuring signal strength that more closely reflects the signal that a viewer's television set actually receives. It argues that a number of flaws exist in the current measurement and prediction processes when they are used for SHVA purposes.

²⁶*ABC v. PrimeTime 24*, Permanent Injunction, 1998 WL 544297, *2; *ABC v. PrimeTime 24*, Court Opinion, 1998 WL 544286, *9.

²⁷1998 WL 544297, *2, *6; 1998 WL 544286, *9.

A third lawsuit was brought by an NBC affiliate in Amarillo, Texas, and awaits judgment by a federal court. *Kannan Communications, Inc. v. Primetime 24 Joint Venture*, No. 2-96-CV-086 (N.D. Tex.).

A fourth lawsuit was filed by EchoStar against CBS, Fox, NBC, and ABC on October 19, 1998. EchoStar asks the court to find that the Commission has never endorsed a particular model for predicting or measuring Grade B intensity for the purposes of the SHVA. EchoStar wants the court to declare that a viewer's own opinion of the quality of his or her signal quality is adequate for determining whether that home is unserved under the SHVA, and asks the court to endorse a predictive model for identifying served households such that 95% of households receive a Grade B signal 95% of the time with a 50% degree of confidence. (EchoStar's 95 / 95 / 50 court request contrasts with the request in its petition before the Commission, in which it asks for a 99 / 99 / 99 model. *See infra* at ¶ 9).

10. Several parties filed comments either opposing or supporting the petitions.²⁸ Those opposing the petitions generally represented broadcast interests, while those supporting the petitions generally included DTH satellite interests. Broadcasters generally argue that Congress did not grant the Commission the authority to amend the definition of Grade B for purposes of the SHVA. Specifically, they contend that Congress chose the Grade B definition that existed at the time of the SHVA's adoption because it wanted to balance the viability of network/affiliate relationships with consumers' interest in receiving broadcast network service. If the Commission alters the Grade B definition, the petitioners' opponents argue, the number of households entitled to receive distant network signals may inappropriately rise and the number of people watching the local stations will fall as the stations' viewing area shrinks. Fewer viewers could mean lower ratings and less advertising revenue. Further, the petitioners' opponents argue that a reduced viewing area might impact a network station's ability to enforce its exclusivity rights within that area.

11. Opponents to the petitions also contend that Congress did not craft the SHVA with competition in mind, and, although competition is an important goal, it carries little weight in this context. Furthermore, broadcasters challenge the DTH industry's concerns about subscribers who will lose their network signals under the Miami court's injunction by declaring that many of those subscribers are receiving that service illegally. The broadcasters advocate a local-into-local approach for satellite-delivery of network signals, whereby all local network signals would be retransmitted into a local area (*e.g.*, Boston network affiliates would be retransmitted to Boston subscribers). Until that time, broadcasters urge the Commission to refrain from acting on a copyright issue that falls outside of its purview.

12. The DTH industry, on the other hand, contends that Congress did not freeze the definition of Grade B when it enacted the SHVA, and asserts that the Commission has legal authority to change that definition. The supporters of the petitions argue that the Commission can and should conduct a rulemaking to make the definition of Grade B more applicable to the SHVA. Some commenters contend that the current Grade B standard makes it more difficult for DTH providers to compete with cable companies, because DTH providers cannot offer network programming to subscribers while cable can. These commenters argue that subscribers are therefore less likely to consider DTH as a true alternative to cable. The DTH industry states that the Commission has not adopted a definition of Grade B for purposes of SHVA and urges adoption of a standard that reflects actual reception of an adequate television signal at a household's television set.

²⁸**NRTC Petition:** NAB Preliminary Response to NRTC Petition, July 17, 1998; Satellite Broadcasting & Communications Assn (SBCA) Comments to NRTC Petition, July 22, 1998; NRTC Reply to NAB Preliminary Response to NRTC Petition, August 6, 1998; NAB Further Response to NRTC Petition, September 4, 1998; Network Affiliated Stations Alliance (NASA) Comments to NRTC Petition, September 4, 1998; DirecTV Comments to NRTC Petition, September 4, 1998 (*joint for NRTC & Echostar*); DSI / National Programming Service (NPS) Comments to NRTC Petition, September 4, 1998; National Telecommunications Information Administration (NTIA) Comments to NRTC Petition, September 4, 1998; PrimeTime 24 Comments to NRTC Petition, September 4, 1998; SCBA Comments to NRTC Petition, September 4, 1998; Small Cable Business Assn (SCBA) Reply Comments to NRTC Petition, September 21, 1998 (*joint for NRTC & Echostar*); NRTC Reply Comments to NRTC Petition, September 21, 1998. **EchoStar Petition:** DirecTV Comments to EchoStar Petition, September 4, 1998 (*joint for NRTC & Echostar*); SCBA Reply Comments to EchoStar Petition, September 21, 1998 (*joint for NRTC & Echostar*); SBCA Comments to EchoStar Petition, September 25, 1998; A.H. Belo Corp. Opposition to EchoStar Petition, September 25, 1998; Network Affiliated Stations Alliance (NASA) Comments to EchoStar Petition, September 25, 1998; Superstar/Netlink Group Comments to EchoStar Petition, September 25, 1998; Cosmos / Cox Broadcasting Comments to EchoStar Petition, September 25, 1998; NAB Comments to EchoStar Petition, September 25, 1998; PrimeTime 24 Comments to EchoStar Petition, September 25, 1998; EchoStar Reply Comments to EchoStar Petition, October 13, 1998.

Moreover, instead of an actual testing regime for determining a household's eligibility for retransmission of a network television station's signal, they argue, the Commission should adopt a predictive testing methodology that will be accurate and cost-effective. The DTH industry suggests a predictive testing methodology that will return results that reveal, with 99 to 100% confidence, that 99 to 100% of households within a given area can receive a network television station's signal 99 to 100% of the time.²⁹ The DTH industry requests that the Commission act now to further consumer choice, foster competition, and respond to congressional support for action.

13. Members of Congress and the Executive Branch have expressed their concern about the issues raised in the petitions. On July 8, 1998, Senator McCain, Chairman of the Senate Commerce Committee, and Representative Bliley, Chairman of the House Commerce Committee, wrote the Commission, indicating that the Miami injunction "threatens to undermine the progress the Congress has made in promoting competition."³⁰ On August 7, 1998, Representative Boucher and 22 other members of Congress stated in a letter to the Commission that the court's preliminary injunction "raises serious consumer and competitive issues that require immediate review and action by the Commission."³¹ The letter continued, "As the expert regulatory agency in telecommunications matters, the Commission was specifically authorized by Congress to define 'Grade B' for purposes of the SHVA. . . . [W]e believe the Commission should expeditiously act to prevent the imminent disenfranchisement of more than a million satellite customers."³²

14. Larry Irving, director of the National Telecommunications Information Administration (NTIA) at the Department of Commerce, stated that, depending upon which predictive methodology is used, as many as nine million households (10 percent of American television households) could change from served to unserved households.³³ He reiterated the Administration's support for "robust competition" in the MVPD industry and noted that the definition of Grade B intensity could have a "marked effect" on satellite companies' competitive position in the market.

²⁹NRTC Petition at 16; EchoStar Petition at 24, 29; NPS NRTC Comments at 3; DirecTV Joint NRTC & EchoStar Comments at 18.

³⁰Letter to William E. Kennard from Senator John McCain and Representative Tom Bliley, July 8, 1998.

³¹Letter to William E. Kennard from Representative Rick Boucher, *et al.*, August 7, 1998.

³²The Commission has received other comments from Congress, including: Letter to William E. Kennard from Senator Tim Hutchinson, September 15, 1998 ("everyone should have the opportunity to access network programming"); Letter to William E. Kennard from Rep. Pat Danner, August 25, 1998 ("I believe a termination of service [to one million subscribers] raises serious consumer and competitive issues that require immediate review and action by the Commission"); Letter to William E. Kennard from Rep. Bill Redmond, September 15, 1998 ("Action on the NRTC petition represents the most immediate relief available to consumers affected by the events in [the Miami court case]"); Letter to William E. Kennard from Rep. Virgil Goode, September 16, 1998 ("I want to see that residents in rural and mountainous areas will be able to continue to receive network television"); Letter to William E. Kennard from Rep. James H. Maloney, September 25, 1998 ("The FCC should . . . develop a new rule that allows those who otherwise cannot receive acceptable antenna-delivered network signals to receive them with a satellite").

³³Letter to William Kennard from Larry Irving, September 4, 1998.

II. ANALYSIS AND REQUEST FOR COMMENTS

15. These rulemaking petitions address issues that are significant to consumers and the promotion of competition, as well as to the affected industry parties, and we believe that an expedited rulemaking is necessary to protect satellite subscribers who are truly unserved from losing network service. We seek to ensure that as many consumers as possible can receive a broadcast network signal consistent with the intent of the SHVA. We also seek to promote competition among multichannel video programming distributors, where that is possible under the SHVA, and we recognize the important role that local broadcast stations play in their communities. We acknowledge that the SHVA limits the proposals we can make to further these goals and address the petitions. Further, we do not appear to have the statutory authority to prevent most of PrimeTime 24's subscribers from losing their network service under the Miami preliminary injunction (and under a possible permanent injunction). The evidence in the Miami and Raleigh court cases strongly suggests that many, if not most, of those subscribers do not live in "unserved households" under any interpretation of that term.³⁴

16. Two courts have noted that Congress used the Grade B standard when it defined "unserved households" because it wanted an objective measure of a television signal's strength.³⁵ The Commission has sought in its own regulations to advance this approach by establishing discrete field strength values (measured in dBu's) when it defined Grade B and when it created a detailed methodology for determining Grade B contours.³⁶ Consequently, a satellite company may not deliver network signals to a viewer simply because the viewer is subjectively unhappy with his or her television picture. The Miami and Raleigh district courts both concluded that PrimeTime 24 has chosen not to abide by the SHVA's and the Commission's objective standard.³⁷

17. We will explore four issues in this NPRM. First, we seek comment on the Commission's authority to address the issues raised in the court decisions and the NRTC and EchoStar petitions. Second, we seek comment on changing the definition of Grade B intensity so that truly unserved households can be better identified. Third, we seek comment on endorsing or developing a methodology for accurately predicting whether an individual household is able to receive a signal of Grade B intensity. Fourth, we seek comment on developing an easy-to-use and inexpensive method for testing the strength of a broadcast network signal at an individual household.

A. Commission's Authority to Proceed

³⁴See *CBS v. PrimeTime 24*, Order, 9 F.Supp.2d at 1333; *ABC v. PrimeTime 24*, Court Opinion, 1998 WL at 544286.

³⁵See *CBS v. PrimeTime 24*, Order, 9 F.Supp.2d at 1339; *ABC v. PrimeTime 24*, Court Opinion, 1998 WL 544286.

³⁶47 C.F.R. §§ 73.683 and 73.684.

³⁷See *CBS v. PrimeTime 24*, Order, 9 F.Supp.2d at 1341; *ABC v. PrimeTime 24*, Court Opinion, 1998 WL 544286 at 28-29.

18. As indicated above, several broadcasters contend that the Commission lacks the authority to grant the relief requested in the NRTC and EchoStar petitions.³⁸ They state that Congress incorporated by reference the Commission's Grade B definitions and measurement procedures -- effectively freezing them in place -- when the SHVA was adopted in 1988.³⁹ Accordingly, the broadcasters conclude that the Commission may not change its rules now. Some commenters cite legislative history purporting to show that Section 73.683 was specifically included as part of an early draft of the unserved household definition, thus demonstrating Congress' intention to incorporate the definition as it existed at passage.⁴⁰ Commenters argue that Congress did not explicitly direct the Commission to conduct a rulemaking on the definition, so the Commission has no authority to change it.⁴¹ They note that the SHVA is a copyright statute, not a communications law to be administered by the Commission. The National Association of Broadcasters cites a number of cases, including the Supreme Court's decision in *Hassett v. Welch*, for the "well settled canon" that "[w]here one statute adopts the particular provisions of another by a specific and descriptive reference to the statute or provisions adopted . . . [s]uch adoption takes the statute as it exists at the time of adoption and does not include subsequent additions or modifications by the statute so taken unless it does so by express intent."⁴²

19. Parties supporting the petitions respond that Grade B intensity is an ambiguous and open-ended term in the SHVA, evidenced by Congress' failure to explicitly incorporate a rule section into the SHVA's definition of unserved households.⁴³ These commenters conclude that Congress intentionally left the definition in the Commission's hands. EchoStar cites the Supreme Court's holding in *Lukhard v. Reed* that "[i]t is of course not true that whenever Congress enacts legislation using a word that has a given administrative interpretation it means to freeze that administrative interpretation in place."⁴⁴

20. There are four matters relating to the Commission's authority to proceed on particular issues in this rulemaking. First, we seek comment on whether Congress "froze" the definition of a signal of Grade B intensity for purposes of the SHVA when it adopted the Act in 1988. That is, if the Commission were to revise the definition as a general matter, would the definition nevertheless remain unchanged for the purposes of the SHVA? We tentatively conclude that Congress did not "freeze" the definition of a signal of Grade B intensity for SHVA purposes in 1988 and seek comment on this tentative conclusion. When Congress incorporated Grade B into the definition of "unserved households" it did not incorporate specific values, such as the dBu levels the Commission uses in Section 73.683. Further, nothing in the SHVA or legislative history

³⁸NAB NRTC Comments 2, 6; NASA NRTC Comments 3-4, 17, 27-28; SCBA NRTC Comments 2, 8; Belo Echostar Comments at 3 n.3; Cosmos Echostar Comments at 9-11, 19; NAB Echostar Comments at 5, 26-27; NASA Echostar Comments at 3, 14-18, 22-23, 28, 34; SCBA Joint Reply Comments at 3.

³⁹SCBA NRTC Comments at 4; NAB Echostar Comments at 27-29; NASA Echostar Comments at 14-18, 24-27; NASA NRTC Comments at 17, 21-26.

⁴⁰See NASA EchoStar Comments at 23; NAB EchoStar Comments at 27.

⁴¹See, e.g., NASA EchoStar Comments at 23.

⁴²303 U.S. 303, 314 (1938).

⁴³NRTC NRTC Reply at 13.

⁴⁴481 U.S. 368, 379 (1989).

indicates that Congress intended to freeze the value of Grade B when it passed the law in 1988 or when it renewed it in 1994. Where Congress intended to incorporate regulations as they existed on a certain date, it has expressly done so. For example, in Section 111(f) of the Copyright Act, Congress' definition of "local service area of a primary transmitter" explicitly references Commission regulations "in effect on April 15, 1976, or such station's television market as defined in section 76.55(e) of title 47, Code of Federal Regulations (as in effect on September 18, 1993) . . ." ⁴⁵ The federal courts and the Copyright Office of the Library of Congress are primarily responsible for enforcing and administering the copyright laws, but Congress unquestionably turned to the Commission's expertise when it defined unserved household in reference to a "signal of Grade B intensity (*as defined by the Federal Communications Commission*)."

21. With respect to the cases cited by commenters, we note that in reaching its conclusion in *Lukhard v. Reed*, the Court followed *Helvering v. Wilshire*, in which it held that "a regulation interpreting a provision of one act [does not become] frozen into another act merely by reenactment of that provision."⁴⁶ Indeed, the Supreme Court reasoned that if legislation so constrained an agency's ability to conduct rulemaking under its enabling legislation, then "the result would be to read into the grant of express administrative powers an implied condition that they were not to be exercised unless, in effect, the Congress had consented. We do not believe that such impairment of the administrative process is consistent with the statutory scheme which the Congress has designed."⁴⁷ Both *Helvering* and *Lukhard* suggest that the meaning of "signal of Grade B intensity" in SHVA was not frozen for purposes of that Act when SHVA was enacted, but rather can be modified over time by the Commission.

22. Second, we seek comment on whether the Commission has the authority to revise its Grade B rules specifically for the purposes of the SHVA.⁴⁸ Initially, we note that it is indisputable that the Commission has the authority, as a general matter, to revise any of its rules, as long as we explain our reasons for doing so.⁴⁹ But may we create special provisions that would apply only to SHVA? Does the statute permit the Commission to promulgate a special definition of Grade B intensity for the exclusive purposes of the SHVA? What was the Congress' intent? Some commenters argue that we ought to make a specific definition for the SHVA because the Grade B construct is most often used for determining signal intensity over broad areas, not for individual households as the SHVA contemplates.⁵⁰ The Commission has tailored its rules for specific purposes in the past. For example, the Commission determines television stations' service areas using two different, but related, methods, depending on the purpose. For exceptions to the cable syndicated

⁴⁵17 U.S.C. § 111(f).

⁴⁶308 US 90, 100-101 (1939).

⁴⁷*Id.* at 101.

⁴⁸We consider Grade B construct to include (1) the signal intensity levels assigned to Grade B, 47 C.F.R. § 73.683; (2) models for predicting where a Grade B signal exists in an area or at an individual point (or household), *e.g.*, 47 C.F.R. §§ 73.684 and 73.686 predictive models; and (3) the methodologies for testing signal strength in an area or at an individual point.

⁴⁹*Greater Boston Television Corp. v. FCC*, 444 F.2d 841, 850-851 (1971).

⁵⁰*See* 17 U.S.C. §§ 119(a)(2)(B) and 119(d)(10).

exclusivity rules and for cross-ownership purposes, the Commission uses its traditional Grade B contour scheme, but for digital television stations, the Commission uses the Longley-Rice predictive model.⁵¹

23. Third, we seek comment on whether the Commission has the authority to develop a model for predicting whether an individual household can receive a signal of Grade B intensity for purposes of the SHVA. The Commission has developed and used predictive models for determining signal intensity in other contexts -- for example, the traditional Grade B contour and the Longley-Rice models. Broadcasters argue that the Commission does not have the authority to develop a predictive model for SHVA purposes, because the definition of "unserved households" depends on a household's actual ability to receive a signal of Grade B intensity as measured at the household itself.⁵² While satellite providers and broadcasters may negotiate the use of a predictive model, the argument continues, the SHVA does not provide the Commission with jurisdiction to interfere with or to endorse a particular predictive methodology. The satellite providers respond by citing the Commission's current use of predictive methodologies for other purposes. They argue that the Commission may therefore develop a predictive model specifically for the SHVA.

24. A predictive model need not replace actual measurement, but could serve as a presumption of service or lack of service for purposes of the SHVA.⁵³ A presumption could make administration of the unserved household rule easier and more cost-effective for consumers and the industry. Broadcasters and satellite providers would be able to rely on a Commission-endorsed model when deciding whether individual consumers are presumed to be eligible to receive satellite-delivered network signals.⁵⁴ Moreover, a predictive process might be a judicially acceptable means for a satellite service provider to carry its burden of showing "that its secondary transmission of a primary transmission by a network station is for private home viewing to an unserved household."⁵⁵ Such an approach is consistent with the federal court's use of a variation of the

⁵¹See *infra* ¶ 34; 47 C.F.R. § 76.156(a) (exceptions to syndicated exclusivity rules); 47 C.F.R. § 76.501(a) (cross-ownership rules); 47 C.F.R. § 73.622(e)(1) (DTV service areas).

⁵²NASA NRTC Comments at 2-3, 17-20; NASA Echostar Comments at 10-11, 14-18.

⁵³We note that some broadcasters have entered into agreements with Primestar and Netlink (satellite television providers) to resolve disputes arising from the SHVA requirements. These settlements assign five-digit zip codes to each station and classify each zip code as "red light" if more than 50% of the zip code's population is served -- based on Longley-Rice propagation data -- and as "green light" if 50% or less of the population in the zip code is served. Primestar and Netlink agreed in this settlement that they will not sign up new subscribers who are in a "red light zip code" unless the station grants a waiver or the satellite carrier conducts a signal intensity test that shows the household does not receive a Grade B intensity signal. The agreement also describes a simplified testing methodology for measuring signal intensity at a home and provides that the "loser pays" for any tests that are conducted. See *Settlement and Compliance Agreement Between ABC, Inc., CBS Broadcasting, Inc., Fox Broadcasting Company, National Broadcasting Company, and Certain ABC, CBS, Fox, and NBC Network Stations; the National Association of Broadcasters; the ABC Television Affiliates Association, the CBS Television Network Affiliates Association, the Fox Television Affiliates Association, and the NBC Television Affiliates Association AND Primestar Partners, L.P., Netlink USA, and Telluride Cablevision, Inc.* This settlement is a part of the public record in this proceeding.

⁵⁴Commenters note that consumers and industry need certainty in this area. PrimeTime 24 NRTC Comments at 8-9, 13; Superstar Echostar Comments at 8-10; DirecTV Joint Comments at 2, 10-11, 19.

⁵⁵17 U.S.C. §119(a)(5)(D).

Commission's Longley-Rice predictive methodology in its preliminary injunction in the PrimeTime 24 proceeding in Miami.⁵⁶

25. Fourth, we seek comment on our conclusion that the Commission's authority to define a signal of Grade B intensity reasonably includes the authority to adopt a method of measuring signal intensity at an individual household. The Commission has already established a method of measuring service within an area or for propagation analysis, but has not established a method specifically for measuring signal intensity at an individual household.⁵⁷ The SHVA is concerned with adequate television signals at individual households.⁵⁸ Importantly, it does not matter to consumers that other households (a next-door neighbor or a family across town) can actually receive network signals when they cannot.

B. Definition, Prediction, and Measurement Proposals

26. The measurement and prediction techniques included in Part 73 of the Commission's rules and as developed in other contexts constitute a set of tools relating to signal propagation and reception that are useful for a variety of purposes. Although this proceeding focuses on concerns that are specific to SHVA, we recognize that refinements in the rules and in our knowledge about the in-home viewing environment (antennas, transmission lines, and receivers) and prediction methodologies have potential carryover into some other aspects of the Commission's rules. In some respects, however, the matters are unique to the SHVA context. Thus, for example, the Commission's rules do not typically focus on signal availability measurement techniques relating to service to a single discrete location or household. Standardization of a single household measurement process would thus not necessarily have broad implications for other parts of the Commission's rules. Although our focus is on changes specifically relevant for SHVA purposes, we seek comment on the general question of what other non-SHVA rules or policies might be implicated by the changes that are discussed below. We note, for example, that our DTV service replication models are also based upon duplicating the Grade B service area of existing analog broadcast stations. Certain interference criteria also incorporate the Grade B service area of television broadcast stations. We also note that the Commission has a history of using different tools in different contexts depending on the degree of precision desired, the expense of the process used, and the

⁵⁶*CBS, Inc. et al. v. PrimeTime 24 Joint Venture*, Supplemental Order Granting Plaintiffs' Motion for Preliminary Injunction, at 3. (For an explanation of the Longley-Rice model, see ¶ 34.).

⁵⁷Propagation analysis generally involves predictions of the strength of a signal over specified paths or areas. Propagation models may incorporate the effects of terrain elevations along the path and other inherent physical characteristics of the environment.

⁵⁸See H.R. Rep. 100-887(I), at 1 ("The purpose of the proposed legislation is to create an interim statutory license in the Copyright Act for satellite carriers to retransmit television broadcast signals of superstations and network stations to earth station owners for private home viewing"); 17 U.S.C. § 119(d)(1) (definition of distributor refers to secondary transmission of network signals to "individual subscribers"); § 119(d)(8) (definition of subscriber refers to an "individual" who receives satellite service); H.R. Rep. 100-887(I), at 5-6 (1998), *reprinted in* 1988 U.S.C.C.A.N. 5577 (before the 1988 SHVA, "[v]ery little attention was paid to copyright issues posed by satellite transmissions directly to individuals for private home viewing . . . it is appropriate for Congress to intercede and delineate this Nation's intellectual property laws").

economic and technical tradeoffs involved in any specific issue.⁵⁹ We invite comment on this issue and request that parties provide specific rationales for any differences between SHVA and non-SHVA definitions, prediction models, and measurement methods that they advocate.

1. Defining a Signal of Grade B Intensity

27. A signal of Grade B intensity is an objective standard that, as currently defined in Section 73.683, may not distinguish adequately between served and unserved households. The Grade B signal intensity values specified in our rules were designed to enable reception of a television picture that is acceptable to the median observer, "assuming a receiving installation (antenna, transmission line, and receiver) considered to be typical of outlying or near-fringe areas."⁶⁰ Grade B service also assumes the absence of man-made noise or interference from other stations.⁶¹ There was little specific comment in the NRTC and EchoStar petitions or in the responsive pleadings addressing possible changes in the field strength levels specified in the rules. Has what constitutes a "conventional outdoor rooftop receiving antenna" and the concept of the quality of service that viewers consider acceptable changed since the Commission adopted the Grade B signal strength levels in the 1950s? Would these standards need modification so that the median observer would continue to find the service acceptable? For example, receivers may have improved, or the assumptions regarding interference in outlying areas may no longer be valid.⁶² Changing the standard of an acceptable signal could have detrimental effects on the viability of local television stations and, potentially, on the goal of localism. We have no evidence that the underlying technical planning factors have changed in a way that would justify revising the current Grade B signal intensity levels.⁶³ We welcome comments, supported by evidence, regarding any claimed changes to the assumptions made in deriving the Grade B signal intensity.

28. In soliciting comments on this issue, we recognize that our flexibility to change the Grade B intensity values is naturally constrained by the existence of the Grade A standard. The Grade A intensity

⁵⁹As the Commission has previously noted in a related context (*Report and Order in Dockets 16004 and 18052*, 53 FCC 2d 855, para. 17 (1975)):

In a regulatory system engineering rules are administrative tools, and a decision, at any time, to substitute new tools for old, even though they may be demonstrated to be keener and more precise than the ones presently available, inevitably must take into consideration the practical consequences of such action, both with respect to efficiency, expeditiousness and finality of regulatory processes, and the impact of the rule changes on those whose activities are under the jurisdiction of the regulatory body.

⁶⁰*See, e.g.*, O'Connor, Robert A., "Understanding Television's Grade A and Grade B Service Contours," at 139.

⁶¹*Id.*

⁶²*See, e.g.*, Gary S. Kalagian, "A review of the Technical Planning Factors for the VHF Television Service," FCC, Office of Chief Engineer, Bulletin RS77-01 (March 1, 1977), p. 11 ("The assumption of 0 db to overcome rural noise in these 'rural' areas' is probably no longer valid because of the increased number of high voltage power lines and motor vehicle traffic volume.")

⁶³*Id.*; *see also* O'Connor, Robert A., "Understanding Television's Grade A and Grade B Service Contours." As noted in fn.16, *supra*, these signal intensity values incorporate "time variability" factors. *See also* ¶ 32.

values are based on 70% of the locations receiving an acceptable picture 90% of the time.⁶⁴ Therefore, we believe that we cannot modify Grade B intensity so much that it effectively equals or exceeds Grade A signal intensity. We invite comments on all the factors that determine the Grade B signal intensity. We also seek comment on whether changes to the current intensity values would have a detrimental effect on network-affiliate relationships and localism, as well as other Commission rules that involve the current Grade B standard.

2. Predicting a Signal of Grade B Intensity

29. The definition of an unserved household as a household that "cannot receive ... a signal of Grade B intensity" most logically refers to signal measurement at an individual household to determine if an adequate signal is actually received. Because of the costs and difficulties of individual measurements, however, for many purposes a predictive model is used in lieu of actual measurements. Consistent with this notion, the EchoStar petition asks the Commission to adopt or endorse an accurate model for predicting whether an individual household receives a Grade B intensity signal.⁶⁵

30. We believe that predictive models can be effective proxies for individual household measurements. The satellite and broadcast industry currently make use of predictive models such as the Longley-Rice methodology. However, different parties do not always agree on which model is most appropriate for identifying unserved households. Even when parties use the same model, they may disagree on the factors that are considered in that model. For example, different variations of the Longley-Rice model may or may not account for vegetation or buildings. In addition, studies using the Longley-Rice model, such as our DTV analyses, may account for interference. If the Commission endorses a predictive model in this rulemaking, parties will not need to spend future resources and time debating methodology. However, consistent with the SHVA, no Commission-endorsed model will preclude a party from using actual measurements at individual households.

31. The difference in taking actual measurements at individual households and using predictive models is significant, because measurement requires time, money, and other resources that often outweigh the benefits. For example, it may cost more for a satellite company to take a measurement than it can recover through subscriber fees. To avoid these costs, satellite providers, broadcasters, and consumers have often turned to predictive models that erroneously permit some served households to receive satellite network service, or, conversely, that prevent some unserved households from being eligible to receive network stations via satellite.⁶⁶

32. Even though Grade B signal intensity is defined as discrete values measured in dBu's, the intensity of broadcast signals at particular locations and at particular times cannot be precisely determined, regardless of the predictive method used. Signal strength varies randomly over location and time, so signal propagation must be considered on a statistical basis. This is true whether the signal intensity is predicted at a fixed location (such as an individual household) or over an area. Some prediction methods, including the

⁶⁴See also ¶ 32.

⁶⁵EchoStar Petition at 1-2.

⁶⁶See NTIA NRTC Comments at 1-2; PrimeTime 24 NRTC Comments at 4, 7, 13; PrimeTime 24 Echostar Comments at 3-4; DirecTV Joint Comments at 17.

Commission's propagation curves, predict the occurrence of median signal strengths (*i.e.*, signal strengths expected to be exceeded at 50% of the locations in a particular area at least 50% of the time). Under this approach, "location" and "time" variability factors are added to the signal level for an acceptable picture so that the desired statistical reliability is achieved. The values chosen for the Grade B signal intensity account for this variability, and therefore, predict that the best 50% of the locations along the Grade B contour will receive an acceptable picture 90% of the time. In other predictive models, including the Longley-Rice point-to-point model, this variability is built into the model, rather than into the signal intensity value. We seek comment on whether it would be appropriate to consider changing the location and time variability percentages. For example, should more than 50% of viewers receive an acceptable picture more than 90% of the time? We also seek comment on whether such changes should be incorporated into the signal intensity values or the predictive model.

33. As previously noted, the Commission has used predictive models for determining signal intensity in the past.⁶⁷ We seek comment on the application of these models in the SHVA context. We tentatively conclude that the Commission's traditional predictive methodology for determining a Grade B contour, outlined in Section 73.684 of the Commission's rules, is insufficient for predicting signal strength at individual households. We seek comment on this tentative conclusion. The traditional Grade B methodology predicts a signal's strength by using radial lines extending ten miles from a television station's transmitter.⁶⁸ This methodology does not accurately reflect topographic differences in a station's transmission area, and explicitly does not account for interference from other signals.⁶⁹ These omissions result in an imperfect methodology for predicting whether an individual household can receive an adequate signal. For example, terrain features beyond 10 miles from a station's transmitter site may block a house's reception or a house that sits at the edge of two different television markets may suffer from interfering signals.

34. While our traditional Grade B contour methodology is inadequate for predicting the signal level at a single location, we have recently adopted rules in the DTV proceeding for analyzing TV service using a point-to-point prediction method based on the Longley-Rice propagation model.⁷⁰ We propose that the Longley-Rice propagation model, as implemented for DTV, be used to refine the Grade B service prediction for the purpose of SHVA determinations. The Longley-Rice propagation model is the most widely-used private means of predicting a Grade B coverage area for SHVA purposes. It provides an estimate of signal strength, similar to the traditional Grade B contour method. However, the Longley-Rice model adjusts the predictions for changes in terrain (*e.g.*, hills and valleys) along the entire path from the transmitter site to the specified receive site. Thus, while the traditional method often results in smooth concentric circles surrounding a transmission tower, the Longley-Rice method more precisely describes actual areas of coverage. While the broadcasters support the use of the Longley-Rice model in the SHVA context, the satellite interests claim it

⁶⁷See ¶ 20.

⁶⁸See 47 C.F.R. §§ 73.684(d) and 73.686(b).

⁶⁹47 C.F.R. §§ 73.683(a) and 73.684(a).

⁷⁰Our implementation of the Longley-Rice model for analysis of DTV and analog TV service in the DTV proceeding is described in "Longley-Rice Methodology for Evaluating TV Coverage and Interference," OET Bulletin 69, Federal Communications Commission (July 2, 1997) <<http://www.fcc.gov/oet/info/documents/bulletins/#69>>. Longley-Rice is the Commission's designated methodology for determining where service is provided by a DTV station. See 47 C.F.R. § 73.622(e).

is insufficient. The detractors agree that a Longley-Rice analysis has advantages over a traditional Grade B contour, but note that it fails to account for several important factors that affect signal availability, including interference from other signals, vegetation, and buildings. We seek comment generally on this proposal, as well as specifically on the following questions. Should consideration of co-channel and adjacent-channel interference as implemented for DTV be part of the methodology used for SHVA purposes? Is it necessary to prescribe how accurately receive location coordinates are specified? Can Longley-Rice be modified to increase the probability of identifying served and unserved households more accurately? How? What are the predictive factors that are missing in the current Longley-Rice model? Can Longley-Rice reasonably be modified to account for all these factors? What effect would incorporation of these additional factors have on the cost and practicality of the Longley-Rice methodology? Can Longley-Rice or a modified version of Longley-Rice be used in conjunction with a commercially available geocoding process to provide a workable predictive model for satellite providers, broadcasters, and consumers to use for determining whether a given subscriber is presumed to be unserved? We seek comment on whether such currently-available approaches are working well for the industries and consumers.⁷¹

35. We also invite parties to submit any other methodology that they believe will more accurately and cost-effectively predict whether an individual household is able to receive a signal of Grade B intensity. We seek to identify a predictive model that more accurately determines whether a household is unserved for purposes of the SHVA. Is there a predictive methodology that will increase the probability that unserved households will be more accurately identified (*e.g.*, by taking into account interference)? What is that methodology? For either a version of the Longley-Rice model or another alternative methodology, how might parties use a new predictive model? Can and should the Commission endorse or develop a predictive model? Should we endorse a model that already exists or endorse such a model with modifications? What are the costs associated with any of the suggested methodologies?

36. We acknowledge and reiterate Congress' decision in the SHVA to protect network-affiliate relationships and to foster localism in broadcasting. If we change the number of viewers predicted to receive a local station, we may substantially affect these policies. As we have noted, localism is central to our policies governing broadcasting and the obligation of broadcasters to serve the public interest.⁷² In proposing a new or modified predictive model for purposes of the SHVA, we seek comment on what, if any, effects different predictive models will have on these policies, and what, if any, steps we can take to further such policies.

3. Testing for Signal Intensity at Individual Households

37. For the SHVA to function properly, a relatively low cost, accurate, and reproducible methodology for measuring the presence of a Grade B intensity signal in a household is of particular importance. Although, because of the costs and delays involved, it would be desirable to minimize the need for individual testing to the extent possible, individual testing is the key safety net mechanism under the SHVA for proving that a specific household is unserved and thus eligible under the law to receive satellite delivery of

⁷¹For example, Decisionmark Corporation is currently working with broadcasters and satellite providers to provide mapping information about signal areas. They sponsor web sites, <<http://www.shva.com/maps>> and <<http://getawaiver.com>>, that provide information about served and unserved areas to consumers, broadcasters and participating satellite providers.

⁷²See *supra* para. 3.

network affiliated television stations. We therefore propose to explore a method of measuring signal intensity at individual households that is accurate, easier, and less expensive than the current method.

38. The Commission's current method of measuring the field strength of over-the-air signals in a station service area requires a so-called 100-foot mobile run.⁷³ The run typically involves a truck with a 30-foot antenna that takes continuous measurements while being driven a distance of 100 feet. The antenna must be rotated to the best receiving position, and engineers record factors that might affect signals, such as topography, height and type of vegetation, buildings, obstacles, and weather. If overhead obstacles get in the way, a cluster of measurements must be taken at locations within 200 feet of each other. This elaborate procedure can cost several hundred dollars each time it is performed.⁷⁴ This is an expensive proposition for a satellite company or a consumer who wants to prove that a household is unserved by over-the-air signals. When multiplied over hundreds of households at the outer edges of a station's service area, the cost may become prohibitive and may prevent many truly unserved consumers from receiving broadcast network service.

39. In addition to the difficulties inherent in this test, many of its assumptions may not hold in individual situations. For example, many homes do not have antennas 30 feet above the ground, especially if they are one-story homes. The definition of unserved household only describes reception over a conventional outdoor rooftop receiving antenna,⁷⁵ so requiring measurements on a 30-foot antenna may not reflect what is "conventional." Requiring the truck's antenna to face the direction of the station's tower ignores the reality that consumers' antennas receive several stations, and many do not rotate to the best position for each station. Finally, requiring clusters of tests and a 100-foot mobile run ignores the fact that homes are stationary and that reception may vary considerably over a mobile run on a nearby street. The purpose of the procedure specified in the rules is not to determine the receivability of a signal at a single spot, but to determine, through measurements at a series of grid intersections over a community, the nature of service to the community.⁷⁶

⁷³47 C.F.R. § 73.686(b).

⁷⁴See, e.g., *EchoStar Communications Corp., et al. v. CBS Broadcasting, Inc., et al.*, Plaintiff's Original Complaint and Request for Declaratory Judgment, Civil Action No. 98-B-2285 (D. Colo.) (October 19, 1998) (testing averages \$150 per household). We note that DBS dishes often retail for as little as \$99, plus the programming package.

⁷⁵17 U.S.C. § 119(d)(10)(A).

⁷⁶The Miami court ruled that the signal strength test should be "conducted in accordance with the procedures outlined in the Declaration of Jules Cohen, filed on March 11, 1997." Mr. Cohen states in his Declaration that the procedure "was based on that prescribed by the FCC in 47 C.F.R. § 73.686." Declaration of Jules Cohen in *CBS, et al., v. PrimeTime 24 Joint Venture*, CIV-Nesbitt No. 96-3650 at 8 (executed on March 8, 1998). Mr. Cohen describes the measuring procedure in the following terms. At an accessible road closest to a household, a 100-foot mobile run is made with a conventional rooftop antenna elevated to 30 feet. During the run, a station's field intensity is recorded and the data is stored in a computer. Analysis of the data, made with the aid of a computer program, permits the extraction of the maximum, minimum, and median field intensity found, together with the standard deviation. Median field intensity minus standard deviation is a measure of the least signal intensity likely to be found at the specific location of the household.

In contrast, EchoStar has proposed a signal strength test, in a lawsuit filed in October 1998, that focuses more directly on a single point at a household. *EchoStar Communications Corp., et al. v. CBS Broadcasting, Inc., et al.*, Plaintiff's Original Complaint and Request for Declaratory Judgment, Civil Action No. 98-B-2285 (D. Colo.) (October 19, 1998). Its procedure involves placement of a conventional outdoor rooftop antenna within three feet of the home and raised to the height of the roof. The antenna is oriented to maximize signal strength for the one local station that

40. We seek comment on the modification of the current testing methodology or the creation of a new methodology for measuring signal strength. Any recommendations should lead to a test that is relatively easy to use and inexpensive enough to make it economically practical for the industry and for consumers. We seek comment on what qualifies as "a conventional outdoor rooftop receiving antenna."⁷⁷ Are different antennas required for different parts of the country, or as one moves farther from a television transmitter? What special problems do viewers in multiple dwelling unit buildings ("MDUs") face in gaining access to a conventional outdoor rooftop television antenna? Should the testing methodology be different for high-rise MDUs? Does "conventional outdoor rooftop receiving antenna" include a rotor? How, if at all, should the Grade B criterion of typical of outlying or near-fringe areas⁷⁸ influence the concept of "conventional" antenna? On another note, how do we ensure the objectivity and accuracy of any signal strength test? How do we do so without making the test more difficult, impractical, or expensive? How should antenna height be measured? Should antenna height be set at 30 feet, should it be five feet above the roof, or something else? Should the measurement be related to the placement of the satellite receiver in situations where the satellite and local signal antennas are integrated? If antenna designs are improved over those historically available so that the definition of "conventional" changes, how should that be accommodated in the measurement process?⁷⁹ How should we account for the challenges of raising a rooftop antenna in multiple dwelling units? How should the test account for rotation, or lack of rotation, of antennas that receive the signals of several stations? What type and calibration of measurement equipment is needed? How can the process account for the variations of signal level over the course of a day or with seasonal changes?

C. Other Issues

41. We seek comment on whether the lack of an established methodology for measuring Grade B signal intensity at individual households has hampered the effective functioning of the SHVA. In particular, we note that the SHVA contains a "loser pays" mechanism that allows recovery, in any civil action, of signal measurement costs at a subscriber's household.⁸⁰ Under the SHVA, if a network station questions whether a particular subscriber is unserved, an actual measurement at the subscriber's household may result. If the household is unserved, the broadcast station must pay for the measurement; if the household is served, the

the consumer watches most often. A length of standard household cable is attached to the antenna, and a number of splitters are attached to duplicate the number of splitters the consumer uses to service multiple televisions. A signal measurement is then conducted. If the signal strength is not stable, the antenna is relocated and the same procedure utilized until a stable signal strength is achieved. Readings are taken approximately every thirty seconds for a period of five minutes. If any of the signal strength readings register less than the Grade B signal strength threshold as established by Congress and the FCC, the consumer will be deemed an "unserved household" eligible to receive distant network signals.

⁷⁷See 17 U.S.C. § 119(d)(10)(A).

⁷⁸See O'Connor, Robert A., "Understanding Television's Grade A and Grade B Service Contours," at 139.

⁷⁹We note that initiatives are in progress with the consumer electronics and satellite industries to improve the ability of consumers to receive local signals with individual antennas. *See, e.g.*, fn. 53.

⁸⁰17 U.S.C. § 119(a)(9) (loser pays for signal intensity measurement; recovery of measurement costs in a civil action). *See also* 17 U.S.C. § 119(a)(8)(B)(ii) and (C)(ii) (expired transitional signal intensity measurement procedures).

satellite carrier must pay. We believe that the loser pays mechanism, if used even in the absence of a civil action, would substantially alleviate the cost burden of actual signal measurements by giving both parties an economic incentive to avoid actual measurements in most circumstances. We seek comment on whether parties are making use of the "loser pays" mechanism. If they are not, why not? Can and should we establish rules or policies that will facilitate their ability to do so? We also seek comment on whether the loser pays mechanism, combined with a predictive model that would minimize the need for individual testing in most cases, would facilitate the effective functioning of the Act.

42. We also seek comment on whether we can and should adopt a procedure similar to the SHVA's expired transitional "loser pays" mechanism.⁸¹ Does that provision represent a workable system for allocating burdens of proof, and appropriate incentives to challenge a presumptive rule, in determining who is and who is not an unserved household? Establishing a system based on an initial presumption would help create certainty and provide a good starting point for managing this issue on a large scale. Are there other mechanisms that can better serve the purposes of the SHVA? One alternative might be the agreement reached between broadcasters and two satellite carriers, Primestar Partners and Netlink USA, that created presumptive zones of served and unserved households based on zip codes.⁸² Yet another alternative might be the methodology developed by Decisionmark Corporation of Cedar Rapids, Iowa, that is used by both PrimeTime 24 and broadcasters in the Miami federal court case. This methodology uses a variation of the Longley-Rice methodology to determine whether individual homes are unserved. We seek comment on these approaches. Are there additional actions the Commission can and should take to make enforcement of the SHVA more effective?

43. Finally, we seek comment on the prospect that the industry will develop "local-into-local" technology to serve every community. The local-into-local concept means that satellite carriers would provide subscribers with the signals of their local broadcast network affiliates instead of signals from distant stations. If satellite carriers were allowed to retransmit a broadcast network station's signal into that station's local market, then the risks of damaging the goals of broadcast localism could be mitigated. Some satellite carriers have already developed limited plans for accomplishing local-into-local service. For example, EchoStar has a local-into-local option for unserved households in more than a dozen television markets, and Capitol Broadcasting Inc. of Raleigh, North Carolina, has reportedly developed the technology to deliver local-into-local service for most, if not all, television markets.⁸³ We note that some interested parties have argued that a local-into-local extension of the compulsory license in the current copyright laws might obviate the need for Commission action in this area. The Commission, of course, lacks the statutory authority to create such an extension. However, Section 335(a) of the Communications Act of 1934 instructs the Commission to "examine the opportunities that the establishment of direct broadcast satellite service provides for the principle of localism under this Act, and the methods by which such principle may be served through technological and other developments in, or regulation

⁸¹See 17 U.S.C. § 119(a)(8)(B)(ii) and (C)(ii). Section 119(a)(8) expired on December 31, 1996. *Satellite Home Viewer Act of 1994*, § 6(c), Pub. L. 103-369 (Oct. 18, 1994).

⁸²See, *supra*, n. 53.

⁸³See EchoStar Communications Corp., *DISH NETWORK IS THE ONLY ONE!* (press release), Jan. 8, 1998; Vincent Kiernan, *Making Satellites More Local*, *Satellite Communications*, Apr. 30, 1998.

of, such service."⁸⁴ If Congress adopted a local-into-local extension of the compulsory license, how would such a change affect the need for, and viability of, the proposals in this rulemaking? We seek comment on the feasibility -- particularly the technical feasibility -- of a local-into-local option and on a time frame for implementing this possible solution to the demands for satellite delivery of network station signals.

III. PROCEDURAL MATTERS

44. *Paperwork Reduction Act of 1995 Analysis.* The requirements proposed in this Notice have been analyzed with respect to the Paperwork Reduction Act of 1995 (the "1995 Act") and would impose new and modified information collection requirements on the public. The Commission, as part of its continuing effort to reduce paperwork burdens, invites the general public and the Office of Management and Budget ("OMB") to take this opportunity to comment on the proposed information collection requirements contained in this Notice, as required by the 1995 Act. Public comments are due on or before 30 days from date of publication of this Notice in the Federal Register. OMB comments are due on or before 60 days from date of publication of this Notice in the Federal Register. Comments should address: (a) whether the proposed collection of information is necessary for the proper performance of the functions of the Commission, including whether the information would have practical utility; (b) the accuracy of the Commission's burden estimates; (c) ways to enhance the quality, utility, and clarity of the information collected; and (d) ways to minimize the burden of the collection of information on the respondents, including the use of automated collection techniques or other forms of information technology.

45. Written comments by the public on the proposed new and modified information collection requirements are due on or before 30 days from the date of publication of this Notice in the Federal Register. Written comments must be submitted by OMB on the proposed new and modified information collection requirements on or before 60 days after date of publication of this Notice in the Federal Register. Comments should be submitted to Judy Boley, Federal Communications Commission, Room C1804, 445 12th Street, S.W., Washington, D.C. 20554, or via the Internet to jboley@fcc.gov, and to Timothy Fain, OMB Desk Officer, 10236 NEOB, 725 - 17th Street, N.W., Washington, DC 20503 or via the Internet to fain_t@al.eop.gov. For additional information on the proposed information collection requirements, contact Judy Boley at 202-418-0214 or via the Internet at the above address.

46. *Initial Regulatory Flexibility Act Analysis.* The regulatory flexibility analysis is found in Appendix A, attached.

47. *Ex Parte Rules.* This proceeding will be treated as a "permit-but-disclose" proceeding subject to the "permit-but-disclose" requirements under Section 1.1206(b) of the rules. 47 C.F.R. § 1.1206(b), as revised. Ex parte presentations are permissible if disclosed in accordance with Commission rules, except during the Sunshine Agenda period when presentations, ex parte or otherwise, are generally prohibited. Persons making oral ex parte presentations are reminded that a memorandum summarizing a presentation must contain a summary of the substance of the presentation and not merely a listing of the subjects discussed. More than a one or two sentence description of the views and arguments presented is generally required. See 47 C.F.R. § 1.1206(b)(2), as revised. Additional rules pertaining to oral and written presentations are set forth in Section 1.1206(b).

⁸⁴47 U.S.C. § 335(a).

48. *Filing of Comments and Reply Comments.* Pursuant to Sections 1.415 and 1.419 of the Commission's rules, 47 C.F.R. §§ 1.415, 1.419, interested parties may file comments on or before December 11, 1998 and reply comments on or before December 21, 1998. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS) or by filing paper copies. See Electronic Filing of Documents in Rulemaking Proceedings, 63 Fed. Reg. 24,121 (1998).

49. Comments filed through the ECFS can be sent as an electronic file via the Internet to <<http://www.fcc.gov/e-file/ecfs.html>>. Generally, only one copy of an electronic submission must be filed. If multiple docket or rulemaking numbers appear in the caption of this proceeding, however, commenters must transmit one electronic copy of the comments to each docket or rulemaking number referenced in the caption. In completing the transmittal screen, commenters should include their full name, Postal Service mailing address, and the applicable docket or rulemaking number. Parties may also submit an electronic comment by Internet e-mail. To get filing instructions for e-mail comments, commenters should send an e-mail to ecfs@fcc.gov, and should include the following words in the body of the message, "get form <your e-mail address." A sample form and directions will be sent in reply.

50. Parties who choose to file by paper must file an original and four copies of each filing. If more than one docket or rulemaking number appear in the caption of this proceeding, commenters must submit two additional copies for each additional docket or rulemaking number. All filings must be sent to the Commission's Secretary, Magalie Roman Salas, Office of the Secretary, Federal Communications Commission, 445 12th Street, S.W., Washington, D.C. 20554. The Cable Services Bureau contact for this proceeding is Don Fowler at 202-418-7200, or at dfowler@fcc.gov.

51. Parties who choose to file by paper should also submit their comments on diskette. These diskettes should be submitted to: Don Fowler, 2033 M Street, NW, 9th Floor, Washington, DC 20554. Such a submission should be on a 3.5 inch diskette formatted in an IBM compatible format using WordPerfect 5.1 for Windows or compatible software. The diskette should be accompanied by a cover letter and should be submitted in "read only" mode. The diskette should be clearly labelled with the commenter's name, proceeding (including the lead docket number in this case [**Docket No.--**]), type of pleading (comment or reply comment), date of submission, and the name of the electronic file on the diskette. The label should also include the following phrase "Disk Copy - Not an Original." Each diskette should contain only one party's pleadings, preferably in a single electronic file. In addition, commenters must send diskette copies to the Commission's copy contractor, International Transcription Service, Inc., 1231 20th Street, N.W., Washington, D.C. 20036.

52. *Ordering Clauses.* **IT IS ORDERED** that, pursuant to Sections 1, 4(i), 4(j) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154(i), and 154(j); and Section 119(d)(10)(a) of the Copyright Act, 17 U.S.C. § 119(d)(10)(a), **NOTICE IS HEREBY GIVEN** of proposed amendments to Part 73, in accordance with the proposals, discussions and statements of issues in this *Notice of Proposed Rulemaking*, and that **COMMENT IS SOUGHT** regarding such proposals, discussions and statements of issues.

53. **IT IS FURTHER ORDERED** that the Commission's Office of Public Affairs, Reference Operations Division, shall send a copy of this Notice of Proposed Rulemaking, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration in accordance

with paragraph 603(a) of the Regulatory Flexibility Act, Pub. L. No. 96-354, 94 Stat. 1164, 5 U.S.C. §§ 601 et seq. (1981).

FEDERAL COMMUNICATIONS COMMISSION

Magalie Roman Salas
Secretary

Appendix A

Initial Regulatory Flexibility Analysis

As required by the Regulatory Flexibility Act ("RFA"),⁸⁵ the Commission has prepared this Initial Regulatory Flexibility Analysis ("IRFA") of the possible significant economic impact on small entities by the policies and proposed action in this NPRM. Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the NPRM provided above in ¶ 42. The Commission will send a copy of this NPRM, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration ("SBA")⁸⁶ and to Congress.⁸⁷ In addition, this NPRM and IRFA (or summaries thereof) will be published in the Federal Register.⁸⁸

A. Need for, and Objective of, the NPRM

I. In this NPRM, the Commission responds to Petitions for Rulemaking filed by the National Rural Telecommunications Cooperative and EchoStar Communications Corporation requesting that the Commission address the methods for determining whether a household is "unserved" by network television stations for purposes of the 1988 Satellite Home Viewer Act.⁸⁹

B. Legal Basis

1. This NPRM is authorized under Sections 1, 4(i), 4(j) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154(i), and 154(j) and Section 119(d)(10)(a) of the Copyright Act, 17 U.S.C. § 119(d)(10)(a).

C. Description and Estimate of the Number of Small Entities To Which the NPRM Will Apply

2. The RFA directs the Commission to provide a description of and, where feasible, and estimate of the number of small entities that will be affected by the proposed action.⁹⁰ The RFA defines the term "small

⁸⁵ 5 U.S.C. § 603. The RFA, 5 U.S.C. § 601-12, has been amended by the Contract With America Advancement Act of 1996, Pub. L. No. 104-121, 110 Stat. 847 (1996) ("CWAAA"). Title II of the CWAAA is the Small Business Regulatory Enforcement Fairness Act of 1996 ("SBREFA").

⁸⁶ 5 U.S.C. § 603(a).

⁸⁷ 5 U.S.C. § 801(a)(1)(A).

⁸⁸ 5 U.S.C. § 603(a).

⁸⁹ 17 U.S.C. § 119.

⁹⁰ 5 U.S.C. § 604(a)(3).

entity" as having the same meaning as the terms "small business," "small organization," and "small business concern" under Section 3 of the Small Business Act.⁹¹ Under the Small Business Act, a small business concern is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the SBA.⁹² The proposed action in this NPRM will affect television broadcasting licensees and DBS operators.

3. *Television Stations.* The policies and proposed action in this NPRM will apply to television broadcasting licensees, and potential licensees of television service. The SBA defines a television broadcasting station that has no more than \$10.5 million in annual receipts as a small business.⁹³ Television broadcasting stations consist of establishments primarily engaged in broadcasting visual programs by television to the public, except cable and other pay television services.⁹⁴ Included in this industry are commercial, religious, educational, and other television stations.⁹⁵ Also included are establishments primarily engaged in television broadcasting and that produce taped television program materials.⁹⁶ Separate establishments primarily engaged in producing taped television program materials are classified under another SIC number.⁹⁷ There were 1,509 television broadcasting stations operating in the nation in 1992.⁹⁸ That number has remained fairly constant as indicated by the approximately 1,579 operating full power television broadcasting stations in the nation as of May 31, 1998.⁹⁹ In addition, as of October 31, 1997, there were 1,880 low power television broadcasting

⁹¹5 U.S.C. § 604(a)(3).

⁹²15 U.S.C. § 632.

⁹³13 C.F.R. § 121.201, Standard Industrial Code ("SIC") 4833 (1996).

⁹⁴Economics and Statistics Administration, Bureau of Census, U.S. Department of Commerce, 1992 CENSUS OF TRANSPORTATION, COMMUNICATIONS AND UTILITIES, ESTABLISHMENT AND FIRM SIZE, Series UC92-S-1, Appendix A-9 (1995) ("1992 CENSUS OF TRANSPORTATION").

⁹⁵*Id.* See also OMB SIC Manual at 283, which describes "Television Broadcasting Stations (SIC Code 4833) as:

Establishments primarily engaged in broadcasting visual programs by television to the public, except cable and other pay television services. Included in this industry are commercial, religious, educational and other television stations. Also included here are establishments primarily engaged in television broadcasting and which produce taped television program materials.

⁹⁶1992 CENSUS OF TRANSPORTATION, Series UC92-S-1, Appendix A-9.

⁹⁷*Id.* SIC 7812 (Motion Picture and Video Tape Production); SIC 7922 (Theatrical Producers and Miscellaneous Theatrical Services (producers of live radio and television programs).

⁹⁸FCC News Release No. 31327, Jan. 13, 1993.

⁹⁹See *Broadcast Station Totals As Of May 31, 1998*, FCC News Release, June 19, 1998.

("LPTV") broadcasting stations that may also be affected by our proposed rule changes.¹⁰⁰ For 1992¹⁰¹ the number of television broadcasting stations that produced less than \$10.0 million in revenue was 1,155 establishments.¹⁰²

4. Thus, the proposed action will affect many of the approximately 1,574 television broadcasting stations; approximately 1,200 of those stations are considered small businesses.¹⁰³ These estimates may overstate the number of small entities because the revenue figures on which they are based do not include or aggregate revenues from non-television affiliated companies.

5. In addition to owners of operating television broadcasting stations, any entity who seeks or desires to obtain a television broadcasting license may be affected by the proposed action contained in this item. The number of entities that may seek to obtain a television broadcasting license is unknown. We invite comment as to such number.

6. *DBS.* The Commission has not developed a definition of small entities applicable to geostationary or non-geostationary orbit fixed-satellite or DBS service applicants or licensees. Therefore, the applicable definition of small entity is the definition under the SBA rules applicable to Communications Services, Not Elsewhere Classified. This definition provides that a small entity is one with \$11.0 million or less in annual receipts.¹⁰⁴ According to Census Bureau data, there are 848 firms that fall under the category of Communications Services, Not Elsewhere Classified that could potentially fall into the DBS category. Of those, approximately 775 reported annual receipts of \$11 million or less and qualify as small entities.¹⁰⁵ The proposed action in this NPRM applies to entities providing DBS service. Small businesses do not have the financial ability to become DBS licensees because of the high implementation costs associated with satellite services. Because this is an established service, however, with limited spectrum and orbital resources for assignment, we estimate that no more than fifteen entities will be Commission licensees providing these services. Therefore, because of the high implementation costs and the limited spectrum resources, we do not believe that small entities will be impacted by proposed action in this NPRM.

¹⁰⁰Given the nature of LPTV stations, we will presume that all LPTV's qualify as small entities.

¹⁰¹Census for Communications' establishments are performed every five years ending with a "2" or "7". See Economics and Statistics Administration, Bureau of Census, U.S. Department of Commerce.

¹⁰²The amount of \$10 million was used to estimate the number of small business establishments because the relevant Census categories stopped at \$9,999,999 and began at \$10,000,000. No category for \$10.5 million existed. Thus, the number is as accurate as it is possible to calculate with the available information.

¹⁰³We use the 77 percent figure of TV stations operating at less than \$10 million for 1992 and apply it to the 1998 total of 1579 TV stations to arrive at 1,216 stations categorized as small businesses.

¹⁰⁴13 C.F.R. § 121.201, SIC Code 4899.

¹⁰⁵1992 CENSUS OF TRANSPORTATION, Series UC92-S-1, Table 2D, Employment Size of Firms: 1992, SIC Code 4899.

D. Description of Projected Reporting, Record-keeping, and Other Compliance Requirements

7. There may be reporting, record-keeping, and compliance requirements for television broadcasting stations and DBS operators in the form of testing, record-keeping, and reporting, if the Commission adopts any rule changes as a result of this NPRM. We solicit comments on how these projected requirements may be eliminated, reduced, or streamlined.

E. Steps Taken to Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered

8. In discussing the proposed action contained in this NPRM, we have attempted to minimize the burdens on all entities. We seek comment on the impact of our proposed action on small entities and on any possible alternatives that would minimize its impact on small entities.

F. Federal Rules that May Duplicate, Overlap, or Conflict with the Proposed Rule Changes

9. None.