

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

In the Matter of)	
)	
Establishment of a Model for Predicting)	ET Docket No. 10-152
Broadcast Television Field Strength)	
Received at Individual Locations)	ET Docket No. 06-94
)	
Measurement Standards for Digital)	
Television Signals Pursuant to the)	
Satellite Home Viewer Extension and)	
Reauthorization Act of 2004)	

**COMMENTS OF THE
BROADCASTER ASSOCIATIONS**

NATIONAL ASSOCIATION OF BROADCASTERS

ABC TELEVISION AFFILIATES ASSOCIATION

CBS TELEVISION NETWORK AFFILIATES ASSOCIATION

FBC TELEVISION AFFILIATES ASSOCIATION

NBC TELEVISION AFFILIATES

ASSOCIATION FOR MAXIMUM SERVICE TELEVISION

August 24, 2010

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SUMMARY

In this proceeding, the Commission assesses the effect of the Satellite Television Extension and Localism Act (“STELA”) on the Commission’s existing rules concerning prediction and measurement of signal strength at individual locations.

The Broadcaster Associations commend the Commission for its careful work in the Notice of Proposed Rulemaking. We agree with the Commission on all major issues, and in our Comments, provide additional grounds in support of several of the Commission’s tentative conclusions.

The Commission is correct in concluding that it should continue to rely on the Individual Location Longley Rice model, including its specification of an outdoor rooftop antenna. Although one part of the statute now refers only to an “antenna,” two other provisions of the statute make clear that Congress intended the Commission to continue to assume use of an outdoor antenna. First, as the Commission notes, the minimum signal strengths specified by STELA are themselves premised on use of an outdoor antenna (through the planning factors). Second, the Act directs the Commission to rely on the ILLR model set forth in its 2005 report to Congress – and that model expressly assumes use of an outdoor antenna.

In addition to Congress’ having countenanced continued reliance on outdoor antennas in the model, there are many engineering reasons why assuming use of indoor antennas would be unreliable and hopelessly impractical. As explained in detail in the Engineering Statement of Meintel Sgrignoli & Wallace, there are so many variables that affect signal strength indoors that it would be impossible to arrive at any standardized set of parameters for predicting indoor signal strength.

Measurement of signal strength at individual locations should, as the Commission concludes, likewise be done using an outdoor antenna. For the same reasons discussed above concerning predictions, it would be impossible to characterize a “median” indoor environment. And performing measurements indoors would be inconsistent with the fundamental premises of the digital transition, which was based from the beginning on use of outdoor antennas.

Finally, we agree with the Commission that all multicast streams can be treated equally for purposes of both prediction and measurement of signal strength; that the Commission should continue to use the analog ILLR model for LPTV, Class A, and translator stations that are still broadcasting in analog; and that the Commission should continue to rely on its current approaches to land use and land cover and to location and time variability.

* * *

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The National Association of Broadcasters, the ABC Television Affiliates Association, the CBS Television Network Affiliates Association, the FBC Television Affiliates Association, the NBC Television Affiliates, and the Association for Maximum Service Television (collectively, the “Broadcaster Associations”)¹ hereby submit these comments in response to the Notice of

¹ The National Association of Broadcasters is a nonprofit trade association that advocates on behalf of free, local radio and television stations and also broadcast networks before Congress, the Federal Communications Commission and other federal agencies, and the Courts. The ABC Television Affiliates Association is a nonprofit trade association representing television stations affiliated with the ABC Television Network. The CBS Television Network Affiliates Association is a nonprofit trade association representing television stations affiliated with the CBS Television Network. The FBC Television Affiliates Association is a nonprofit trade association representing television stations affiliated with the FOX Television Network. The NBC Television Affiliates is a nonprofit trade association representing television stations affiliated with the NBC Television network. The Association of Maximum Service Television is a nonprofit trade association that advocates, on behalf of local radio and television stations and broadcast networks, before Congress, the Commission and other federal agencies, and the courts. Collectively, the four network affiliate trade associations represent approximately 750 television stations affiliated with the four major broadcast television networks.

Proposed Rulemaking and Further Notice of Proposed Rulemaking² in the above-referenced proceeding.

In this proceeding, the Commission proposes to modify its rules concerning prediction and measurement of over-the-air broadcast signals to comply with several provisions of the Satellite Television Extension and Localism Act of 2010 (“STELA”).³

I. Introduction

The purpose of STELA and all of its predecessors⁴ is “to protect the role of local broadcasters in providing over-the-air television by limiting satellite delivery of network broadcasting programming to subscribers who were ‘unserved’ by over-the-air signals.”⁵ As Senator Leahy stated: “Broadcast television plays a critical role in cities and towns across the country, and remains the primary way in which consumers are able to access local content such as news, weather, and sports.”⁶

The overarching national communications policy endorsed for decades by both Congress and the Commission is that the public interest is served when multichannel video programming distributors (“MVPDs”) carry *local* television stations, rather than duplicating out-of-market stations. The 1988 SHVA and its successors implement the longstanding communications policy

² *Notice of Proposed Rulemaking* and Further Notice of Proposed Rulemaking, ET Docket Nos. 10-152 and 06-94 (released July 28, 2010) (“NPRM”).

³ The Satellite Television Extension and Localism Act of 2010 (“STELA”) § 203, Pub. L. No. 111-175, 124 Stat. 1218, 1245 (2010).

⁴ Predecessors include the Satellite Home Viewer Act of 1988 (“SHVA”), the Satellite Home Viewer Improvement Act of 1999 (“SHVIA”), and the Satellite Home Viewer Extension and Reauthorization Act of 2004 (“SHVERA”).

⁵ Notice of Proposed Rulemaking, *In Re Implementation of Section 203 of the Satellite Television Extension and Localism Act of 2010*, MB Docket No. 10-148 (released July 23, 2010), at ¶ 2.

⁶ 156 CONG. REC. S3435 (May 7, 2010) (statement of Sen. Leahy).

objective of ensuring that free, *local*, over-the-air stations will continue to provide high-quality programming in more than 200 local markets, large and small, throughout the United States. The restrictions on receiving distant out-of-market signals included in legislation governing satellite carriage of broadcast signals were designed to protect local network affiliates from harm and discriminatory treatment by satellite carriers that import duplicative network programming from distant stations.

From a policy perspective, there are far greater benefits to satellite delivery of local, as opposed to distant network stations. Unlike local stations, distant stations do not provide viewers in the local market with their *own* uniquely local news, weather, emergency, public safety, political, public affairs, and public service programming. Viewers watching a distant station, for example, could easily miss an urgent tornado warning that is being delivered that very moment by the local network station.

Meanwhile, viewership of distant stations diverts viewers from the same national programming offered locally by local stations, which, in turn, adversely affects the ability of local stations to fund their free, over-the-air, *local* service. These are the policy principles on which the statutory framework of STELA is based.

II. The Commission Is Correct in Proposing to Continue to Rely on Outdoor Antennas for Both Prediction and Measurement of Signal Strength

The Individual Location Longley-Rice (“ILLR”) model has been one of the Commission’s great success stories. First unveiled in early 1999, it was specifically endorsed later that year by Congress in the Satellite Home Viewer Improvement Act (“SHVIA”). Since then, the FCC has buffed and polished the model in a variety of ways, including taking into account the transition from analog to digital broadcasting. And the Commission proposes to make further adjustments through this proceeding.

But across more than a decade, the centerpiece of the model has remained unchanged: reliance on the time-tested Longley-Rice model to predict signal reception using a conventional outdoor rooftop antenna instead of an indoor antenna. We endorse the Commission's proposal to apply the ILLR model to prediction of digital signal reception at individual locations.

Of course, the ILLR model is only the latest chapter in the successful use of Longley-Rice. The model was first developed in 1968 and – in a more sophisticated form – was used (through OET Bulletin No. 69) as the basis for evaluating coverage and interference during the DTV transition.

In the NPRM, the Commission concludes that “the current standard for an *outdoor* antenna as used in the DTV planning factors should be used in predicting digital signal strength at individual locations.” NPRM, ¶ 21. It reaches the same conclusion regarding the use of an outdoor antenna for measurement of signals at individual households. NPRM, ¶ 36.⁷ The Commission's conclusions are both mandated by the STELA's language and compelled by sound engineering principles and practices.

III. STELA Requires the Commission to Prescribe the Digital ILLR Model the Commission Recommended to Congress in 2005

Amended 47 U.S.C. § 339(c)(3)(A) directs the Commission to prescribe a point-to-point predictive model for determining the ability of individual locations, through the use of an antenna, to receive a television signal in accordance with the signal intensity standard in 47 C.F.R. § 73.622(e)(1). This provision replaces a similar provision that was adopted as part of

⁷ For nearly 15 years, the Commission's rules on Over-the-Air Reception Devices (“OTARD”) have protected the right of homeowners to install rooftop antennas, even if local zoning regulations purport to forbid them. 47 C.F.R. § 1.4000.

SHVIA in 1999 with respect to analog signal intensity standards. However, the new statute contains several differences from its predecessor.

In particular, in characterizing the kind of antenna to be used to measure signal strength for the purpose of determining if a household is “unserved,” STELA dropped from the pre-existing Act’s Title 17 Copyright Act section the descriptive phrase “conventional, stationary, outdoor rooftop receiving” antenna. *Compare* 17 U.S.C. § 119(d)(10)(A) (2004) *with id.* (2010). As explained below, this change in Title 17 was not intended to signal that Congress intended to abandon the longstanding “outdoor” antenna requirement.

In STELA, Congress expressly directs the Commission to adopt a *specific* ILLR predictive digital signal model to determine if a given household can receive a signal satisfying the Commission’s noise-limited service contour standard. STELA states: “In prescribing such model, the Commission *shall rely* on the Individual Location Longley-Rice model set forth by the Commission in CS-Docket No. 98-201, as previously revised, with respect to analog signals, and as recommended by the Commission with respect to digital signals in its Report to Congress in ET Docket No. 05-182, FCC 05-199 (released December 9, 2005).” 47 U.S.C. § 339(c)(3)(A) (2010) (emphasis added). This specified predictive model⁸ relies on and utilizes a “conventional, stationary, outdoor rooftop” antenna for purposes of determining if a household can receive a digital signal of the requisite minimum signal intensity.⁹ Therefore, STELA expressly incorporates the longstanding *outdoor* antenna requirement that is to be used in determining if a household is predicted to receive a digital signal of the requisite minimum signal intensity.

⁸ See *Report to Congress: Study of Digital Television Field Strength Standards and Testing Procedures*, ET Docket No. 05-182, 20 FCC Rcd 19504 (2005) (“*2005 Report to Congress*”).

⁹ See *2005 Report to Congress* at ¶¶ 40-45; see also NPRM at ¶ 20.

The statutory specification of a particular ILLR model is dispositive of the predictive signal measurement issue, and other changes in Title 47 are supportive. For example, prior law (the 1999 SHVIA) had directed the Commission to adopt a predictive signal model in accordance with the signal intensity standard in effect in “section 119 (d)(10)(A) of Title 17.” *See* 47 U.S.C. § 339(c)(3)(A) (1999). STELA, however, drops the reference in 47 U.S.C. § 339(c)(3)(A) to section 119(d)(10)(A) of Title 17 and, instead, directs the Commission to adopt a predictive signal model in accordance with the signal intensity standard in “section 73.622(e)(1)” of the Commission’s rules. Those rules rely on use of a conventional “outdoor” antenna. STELA, therefore, makes no reference to the Copyright Act provision, unlike SHVIA. The elimination of the words qualifying “antenna” in 17 U.S.C. § 119(d)(10)(A) are irrelevant to the task Congress assigned the Commission under this Communications Act provision of STELA.

In the NPRM, the Commission recognizes that the language of STELA expressly commands reliance on outdoor antennas. The Commission notes (NPRM, ¶ 20), as just discussed, that the phrase “use of the digital television signal strength standard in Section 73.622(c)(1) or a successor regulation” implicitly directs use of an outdoor antenna. Those signal intensity standards, the Commission notes, are based on the assumption that a viewer “uses an outdoor antenna with a certain level of gain mounted at 10 meters (33 feet) above ground level.” *Id.* In other words, by relying on the signal strengths set forth in the Commission’s rules, Congress has mandated reliance on rooftop antennas.

Furthermore, while the preceding discussion relates to the *predictive* signal standard, a similar conclusion is compelled for an *actual site* signal measurement test. Congress in STELA did not change the antenna requirements for on-site testing. Congress simply directed the Commission in 47 U.S.C. § 339(c)(3)(B) to conclude its existing rulemaking for on-site testing

and “seek ways to minimize consumer burdens” of on-site testing. But there is no direction or suggestion in STELA that the Commission should abandon or modify the outdoor antenna requirement for on-site measurements.

It is presumed that Congress acts knowing the interpretation an agency has placed on statutory language. *See Lorillard v. Pons*, 434 U.S. 575, 580-81 (1978) (“Congress is presumed to be aware of an administrative or judicial interpretation of a statute and to adopt that interpretation when it re-enacts a statute without change. . . . So too, where . . . Congress adopts a new law incorporating sections of a prior law, Congress normally can be presumed to have had knowledge of the interpretation given to the incorporated law, at least insofar as it affects the new statute.” (citing cases)); *United States v. Ramirez-Ferrer*, 82 F.3d 1131, 1137 (1st Cir. 1996) (“Courts must presume that Congress knows of prior judicial or executive branch interpretations of a statute when it reenacts or amends a statute.”). This principle is all the more salient where the agency, as here, developed a model at Congress’s direction and reported that model to Congress. Congress *knew* that the Commission had recommended a digital ILLR model that was based on an *outdoor* antenna standard.¹⁰ Plainly, Congress would have expressly directed the Commission to alter that model to include an *indoor* antenna standard if that had been its intent.

Congress certainly knows how to direct the Commission to take account of particular factors if that is its intention. *See, e.g., Kimbrough v. United States*, 552 U.S. 85, 103 (2007) (“Congress has shown that it knows how to direct sentencing practices in specific terms.”); *see also Star-Glo Assocs., LP v. United States*, 414 F.3d 1349, 1351 (Fed. Cir. 2005) (finding “Congressional awareness of past agency practice . . . directly reflected in the text of the statute”). In SHVIA, Congress not only directed the Commission to rely on the ILLR model as

¹⁰ *See 2005 Report to Congress* at ¶¶ 40-45.

set forth by the Commission in Docket No. 98-201 but also to “ensure that such model takes into account terrain, building structures, and other land cover variations.” 47 U.S.C. § 339(c)(3)(A) (1999). No such similar language instructing the Commission to take account of indoor antenna usage appears in STELA. In fact, SHVERA had already directed the Commission to examine whether the ILLR model should take into account indoor antennas, *see* 47 C.F.R. § 339(c)(1)(A) and (B)(i), and Congress is presumed to be aware that the Commission had determined that that was inappropriate given the fact that the planning factors for the television broadcast service relied on use of an outdoor antenna. *See Lorillard*, 434 U.S. at 580-81; *Merrill Lynch, Pierce, Fenner & Smith, Inc. v. Curran*, 456 U.S. 353, 382 n.66 (1982) (citing *Lorillard*).

Even if the unqualified word “antenna” were determined to be ambiguous in the first sentence of 47 U.S.C. § 339(c)(3)(A), the direction to the Commission to prescribe a *particular* model in the second sentence is crystal clear. The specific governs the general. *See North American Catholic Educ. Programming Found., Inc. v. FCC*, 437 F.3d 1206, 1209 (D.C. Cir. 2006) (“[I]t is a commonplace of statutory construction that the specific governs the general.” (quoting *Morales v. Trans World Airlines, Inc.*, 504 U.S. 374, 384 (1992))).

In addition, the Commission should recognize that the antenna standard will have virtually no effect on DISH Network.¹¹ Because DISH is now offering local-into-local service in all 210 television markets and because STELA applies the “if local, no distant” principle to digital signals, *see* 47 U.S.C. § 339(a)(2)(C), if the injunction against DISH providing distant network signals is waived, DISH could only provide distant network signals in “short” markets. However, because the “short” market is missing the relevant affiliate, it is irrelevant whether the

¹¹ There is one very small exception: to the extent that DISH’s spot beams do not cover an entire DMA, there may be a handful of households in an otherwise served DMA that are unable to receive local programming by satellite.

ILLR model uses an outdoor or indoor antenna factor because, regardless, the entire market will be a white area with respect to the missing affiliate.

Furthermore, the Commission should recognize that the antenna standard should have no effect on DIRECTV for a different reason. Mr. Derek Chang, Executive Vice President for Content Strategy and Development for DIRECTV, testified before the House Communications Subcommittee that DIRECTV committed to adhere to the Commission's recommended digital ILLR model:

Mr. Stearns: . . . The bill as such is we are trying to get the FCC to update the predictive model and the on-location test for digital broadcasting. Mr. Chang, what would be your advice to the FCC and then I will ask Mr. Padden. What would be your advice to the FCC?

Mr. Chang: I think we said we are willing to adhere to the FCC's digital predictive model.

Mr. Stearns: So the predictive model that they have now, you could adhere to?

Mr. Chang: We would adhere to, yes.¹²

In sum, given the clear language of the statute, there is no reason for the Commission to take a different view of what 47 U.S.C. § 339(c)(3)(A) requires, particularly since the ILLR model will have virtually no effect on DISH (since it is providing local-into-local service in all 210 markets) and that DIRECTV has committed to adhere to the Commission's recommended digital ILLR outdoor antenna model.

¹² *Hearing on "The Satellite Home Viewer Act" [H.R. 2994] Before the House Subcommittee on Communications, Technology, and the Internet, Committee on Energy and Commerce, 111th Cong. (June 16, 2009) (transcript), at 62, ll. 1221-30 (colloquy between Rep. Stearns and Derek Chang, Executive Vice President for Content Strategy and Development, DIRECTV, Inc.).*

IV. Sound Engineering Principles and Practices Dictate Continued Reliance on Outdoor Antennas

In addition to the reasons based on statutory construction, there are compelling engineering reasons why the Commission should continue to rely on outdoor antennas for both prediction and measurement of signal strength.

In planning the transition from analog to digital television broadcasting, the Commission expressly assumed that households would, if necessary, rely on a rooftop antenna to receive over-the-air TV signals. Specifically, that assumption was built into the planning factors that determined the noise-limited service contours of each station. *2005 Report to Congress*, ¶ 125.

As the NRPM correctly concludes, “many factors make it impractical to develop a simple, reliable, and accurate model of *indoor* television reception.” NRPM, ¶ 36. We discuss some of the principal factors here.

A. Basing Prediction and Testing Methodologies on Indoor Antennas Would Be Unrealistic and Impractical.

As an initial matter, the Broadcaster Associations note that the households at issue here use antennas (dishes) to receive satellite signals. Those antennas are, uniformly, mounted outdoors, because satellite signals do not penetrate the interior of households. It would be ironic indeed to establish a standard for service by broadcast stations in which households are expected to use outdoor antennas to receive *satellite* signals and indoor antennas to receive *broadcast* signals. Engineering Statement of Meintel Srignoli & Wallace, ¶ 8 (“MSW Engineering Statement”). As the Commission observed in the *2005 Report to Congress* (at ¶ 45), “commenting parties representing broadcast interests make a compelling point in their observation that satellite dishes likewise can not provide service indoors to such households.”

The Commission also noted that many consumers could install broadcast antennas right next to their satellite dishes. *Id.*

It is also important to recognize that there is wide variability in indoor signal strength across homes. Different homes have different designs, different building materials, different heights, and different interior decorating. Are the walls made of plaster, or wallboard? Is there siding on the house, and if so, is it aluminum? These differences add up to large differences in indoor signal strength. *2005 Report to Congress*, ¶ 43; MSW Engineering Statement, ¶ 11.

Although the Commission has found a way to factor land use and land cover for transmission of signals to outdoor antennas, it would be completely impractical to build a model that would accurately take into account the substantial “clutter” effects caused by the unique circumstances of each household. NPRM, ¶ 36.

Beyond the variations between homes, there are substantial variations in signal strength in different locations within a single home. *2005 Report to Congress*, ¶ 43. It can make a major difference, for example, whether one is in the basement or on the third floor; whether one is in a windowless interior room or next to an open window; or whether the walls of a room are made of masonry or drywall. *Id.*, ¶ 43; MSW Engineering Statement, ¶ 11. Moreover, in any given location, signal strength will vary based on the height above the floor at which a measurement is taken. And the ever-changing movements of people within a room will also affect signal strength.

Worse, if signal intensity tests were taken indoors, households would have the incentive to manipulate the results by directing the tester to a TV in the location with the worst possible reception – such as in the basement. For all these reasons, it would be impractical either to develop an accurate predictive model of indoor signal strength or to do testing indoors.

A standard based on indoor antennas would also be highly problematic because there are wide variations in the types and characteristics of indoor antennas used by consumers. Different indoor antennas have widely varying performance characteristics. MSW Engineering Statement, ¶ 10. As MSW have discovered through extensive testing, even different units of the same model can vary widely. *Id.* It would therefore be difficult, if not impossible, to specify a standard type of indoor antenna. *Id.*

In addition, most households have multiple TVs, and there would be no principled way to determine which one should be tested. Today, the vast majority of households have two or even three TVs. The signal strength available near these different TVs may vary widely. This variability presents yet another obstacle to developing a model of indoor TV reception and to doing signal strength testing indoors. And as to testing, the presence of multiple TVs creates the risk of manipulation, such as the homeowner directing the tester to a TV in a room bounded by masonry walls. MSW Engineering Statement, ¶ 34.

B. Reliance on Indoor Antennas Would Be Inconsistent With the Fundamental Premises of the Digital Transition.

For all the reasons set forth in Section IV.A. above, use of an indoor antenna to attempt to establish either a prediction or site testing methodology would be hopelessly impractical. Moreover, to the extent any such effort was designed to assist consumers, it would, in fact, have just the opposite effect. Abandoning the outdoor antenna standard now would require stations massively to increase their Effective Radiated Power. As the Commission explained in its 2005 Report, based on reasonable assumptions, “*stations would need to transmit signals with an additional 30 dB of power, or 1000 times the power now authorized for DTV stations.*” 2005 Report to Congress, ¶ 43.

As the *2005 Report to Congress* explains: “Such power levels are not practical as they would greatly increase the potential for interference between stations and pose power costs for stations that would likely be so high as to threaten the economic viability of many stations.” *Id.* In fact, currently available TV transmitters are not even capable of transmitting at such sky-high power levels. *Id.* Stations operating at such astonishing power levels would cause tremendous interference to one another. (That is why, of course, the Commission’s rules limit permissible ERPs to far lower levels.) Hence, the net effect of adopting an indoor antenna standard, even were it possible (which it is not), would be substantially to worsen the consumers’ digital signal viewing experience.

V. The Commission’s Other Proposals with Regard to Prediction and Measurement of Signal Strength Are Likewise Correct

A. Multicast streams.

We agree with the Commission (NPRM, ¶¶ 17, 38) that all multicast streams can be treated equally for purposes of both prediction and measurement of signal strength. All of the streams arrive on the same signal and at the same strength. MSW Engineering Statement, ¶ 20. The different programming on multicast channels simply consists of different packets within a station’s transport stream. *Id.*

B. Location and time variability.

The Broadcaster Associations concur that the Commission is correct now, and was correct in the *2005 Report to Congress* (¶¶ 91-92), that location and time variability should be set at (50,90) in running the Longley-Rice model. MSW Engineering Statement, ¶¶ 17-19. As Meintel Sgrignoli & Wallace explain, “radio signal propagation is by its very nature statistical,” *id.*, and changing the long-standing statistical rules would unfairly penalize stations.

The (50,90) location and time settings mean that at least 50% of locations (at the edges of the station's service area) will receive a signal of the required strength at least 90% of the time. NPRM, ¶ 25. But this does not mean that households at the margins of a station's service area can receive signals only 90% of the time. As Meintel Sgrignoli & Wallace discuss, there are many things that such a household can do to improve their reception, including use of "low-noise preamplifiers, higher gain antennas, and lower loss download cables." MSW Engineering Statement, ¶ 18.

C. Land use and land cover.

In running the Longley-Rice model, the Commission proposes to continue to apply land use and land cover ("LULC") data in the same manner as under the SHVIA ILLR model. NPRM, ¶¶ 28-29. That approach was upheld against a challenge by satellite interests, *EchoStar Satellite v. Federal Communications Commission*, 457 F.3d 31 (D.C. Cir. 2006), and the Broadcaster Associations urge that the Commission continue the same approach.

D. LPTV, Translator, and Class A Stations.

The Broadcaster Associations agree with the Commission, as specified by STELA, the signals of low power, translator, and Class A stations must be taken into account both in predicting and in measuring signal strength. MSW Engineering Statement, ¶ 21-22. These stations are often vital in extending the reach of stations in the mountain West and elsewhere. It would be unfair and harmful to broadcasters to ignore them.

To the extent these stations continue broadcasting in analog, we concur with the Commission (NPRM, ¶ 30) that it makes sense to continue to use the Commission's existing tools for predicting analog signal reception, including OET Bulletin 72. Those tools have worked well for years and there is no reason not to continue to employ them with this category of stations.

VI. Way of Reducing Burdens to Consumers of Testing Signal Strength

STELA directs the Commission to “seek ways to minimize consumer burdens associated with on-location testing.”¹³ We respectfully suggest that the Commission can do so by requiring use of a calibrated gain antenna, rather than (for example) a dipole. As Meintel Sgrignoli & Wallace explain, use of a calibrated gain antenna will make testing easier and more efficient. MSW Engineering Statement, ¶ 28. For example, by providing some gain, a stronger signal level can be delivered to the measuring equipment, which will allow a wider variety of test equipment and aid testers by providing a variety of measurement options. *Id.* A gain antenna is also less costly and sturdier than a calibrated half-wave dipole antenna. *Id.* And a gain antenna, unlike a dipole, does not require adjustment of the elements for each station measured. *Id.* As Meintel Sgrignoli & Wallace conclude, “by using the gain antenna, measurements can be completed much faster, more accurately, and with less cost.” *Id.* Use of a calibrated gain antenna would thus help achieve Congress’ goal of reducing the burden on consumers from the testing process.

Conclusion

For the foregoing reasons, the Broadcaster Associations recommend that the Commission implement the Notice and Further Notice of Proposed Rulemaking in the manner set forth herein.

¹³ STELA, § 204(b)(2), amending § 339(c)(3)(B) of the Communications Act, codified at 47 U.S.C. § 339(c)(3)(B).

Respectfully submitted,

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