

**BEFORE THE**  
**Federal Communications Commission**  
**WASHINGTON, D.C. 20554**

In the Matter of )  
 )  
An Inquiry Into the Commission's Policies ) MM Docket No. 93-177  
and Rules Regarding AM Radio Service )  
Directional Antenna Performance Verification )

**JOINT COMMENTS**

**AM Directional Antenna Performance Verification Coalition**  
**The Land Mobile Communications Council**  
**The Wireless Communications Association International, Inc.**

**AM DIRECTIONAL ANTENNA PERFORMANCE  
VERIFICATION COALITION**

John D. Poutasse  
Lerman Senter PLLC  
2000 K Street, N.W., Suite 600  
Washington, DC 20006-1809  
(202) 429-8970

Its Attorneys

**THE LAND MOBLE COMMUNICATIONS COUNCIL**

Al Ittner  
President  
8484 Westpark Drive, Suite 630  
McLean, VA 22102  
(703) 528-5115

**THE WIRELESS COMMUNICATIONS  
ASSOCIATION INTERNATIONAL, INC.**

Paul J. Sinderbrand  
Wilkinson Barker Knauer, LLP  
2300 N Street, N.W., Suite 700  
Washington, DC 20037-1128  
(202) 783-4141

Its Attorneys

January 12, 2009

## TABLE OF CONTENTS

Summary .....	i
I. Clarification of Measuring Point for Ascertaining Whether a Tower is in the Immediate Vicinity of an AM Station .....	3
II. Towers Subject to the New Rules and the Categorical Exemption for Antennas and Antenna Supporting Structures Located on Buildings.....	4
III. Meaningful Notice to AM Stations of Nearby Construction Activities .....	5
IV. Credible Demonstrations of Interference Falling Outside the AM Antenna Protection Criteria.....	6
V. Software to Ascertain Whether a Tower Proposal Falls within the AM Antenna Protection Criteria.....	9
VI. Conclusion.....	10

## Summary

The Joint Commenters applaud the Commission's efforts to both update and consolidate its rules relating to the protection of AM stations from pattern distortions that may occur as a result of the construction or modification of nearby towers. The Joint Commenters believe that the new rules will clarify the proper procedures for ascertaining the impact of nearby construction activities on AM stations, and will reduce both the time and expense associated with performing that analysis.

The Joint Commenters propose the following modifications and clarifications to the proposed rules that they believe will both facilitate compliance with the new rules and enhance their effectiveness:

- ▶ Section 1.30002(a) and (b) should be revised to clarify that the calculation of the critical distance from an AM station of a tower to be constructed or modified is to be made on the basis of the AM station's reference coordinates;
- ▶ The Commission should not permit the use of towers that would otherwise fall within the applicable distance and height criteria if the tower owner does not notify an AM station of upcoming construction activities and fails to detune a tower that adversely affects an AM station;
- ▶ Section 1.3002(e) should be modified to require the analysis of additions to or modifications of an antenna or support structure on a building that would increase the overall physical height of the building by more than 10 electrical degrees;
- ▶ The rules should incorporate more detailed procedures for providing the required notice to AM stations of construction or significant modifications to nearby towers that specify the information that is required to be provided to AM stations and that accommodate, where

possible, a tower proponent's request for clearance of a construction project within less than 30 days;

▶ Section 1.30002(g), which addresses a tower proponent's obligations to remedy distortions to an AM station's pattern caused by the construction or modification of a tower that is not within the applicable distance and height criteria, should be revised to (i) clarify the methodology to be used for a showing of an adverse impact, (ii) provide tower proponents an opportunity to respond to such showings; (iii) incorporate reasonable time limits on the submission of adverse impact showings; and (iv) require AM stations to be responsible for the costs of the design of any necessary detuning apparatus; and

▶ The Commission should make available on its web site software similar to the TOWAIR program that would allow tower proponents to easily determine if a proposed tower falls within the AM station protection criteria.

**BEFORE THE**  
**Federal Communications Commission**  
**WASHINGTON, D.C. 20554**

In the Matter of	)	
	)	
An Inquiry Into the Commission's Policies	)	MM Docket No. 93-177
and Rules Regarding AM Radio Service	)	
Directional Antenna Performance Verification	)	

**JOINT COMMENTS**

**AM DIRECTIONAL ANTENNA PERFORMANCE VERIFICATION COALITION**  
**THE LAND MOBILE COMMUNICATIONS COUNCIL**  
**THE WIRELESS COMMUNICATIONS ASSOCIATION INTERNATIONAL, INC.**

The AM Directional Antenna Performance Verification Coalition<sup>1</sup> (the "Coalition"), the Land Mobile Communications Council<sup>2</sup> ("LMCC") and the Wireless Communications Association International, Inc.<sup>3</sup> ("WCAI") (collectively, the "Joint Commenters") hereby submit these Joint Comments in response to the Second Further Notice of Proposed Rule Making ("Second Further Notice") in the above-captioned proceeding. In the Second Further Notice, the Commission seeks comment on new rules under Part 1 for the protection of AM stations from the effects of nearby tower construction.

On May 4, 2007, the Coalition filed comments in this proceeding that, among other

---

<sup>1</sup> The Coalition consists of the broadcasters, broadcast engineering consultants, and broadcast equipment manufacturers identified on Attachment A.

<sup>2</sup> LMCC is a non-profit association of organizations representing virtually all users of land mobile radio systems, providers of land mobile services, and manufacturers of land mobile radio equipment. LMCC acts with the consensus, and on behalf, of the vast majority of public safety, business, industrial, transportation and private commercial radio users, as well as a diversity of land mobile service providers and equipment manufacturers.

<sup>3</sup> WCAI is an international, nonprofit, technology-neutral trade association whose members comprise the wireless broadband ecosystem. WCAI represents service providers, equipment manufacturers, application developers and other contributors to the wireless broadband industry.

things, proposed new rules that would harmonize the inconsistent treatment afforded under Section 22.371, Section 27.63, and Section 73.1692 with respect to the protection afforded to AM stations from antenna pattern distortions that may result from construction of or significant modifications to nearby towers. As the Commission acknowledged in the Second Further Notice, existing rules relating to the protection of AM stations from nearby construction activities “impose differing requirements on the broadcast and wireless entities, although the issue is the same regardless of the types of antennas mounted on a tower.” Second Further Notice at ¶ 14. Moreover, Part 90 and Part 24 of the Commission’s rules “entirely lack provisions for protecting AM stations from possible effects of nearby tower construction.” *Id.* Under the Commission’s proposal, the AM proximity rules would be consolidated under Part 1 and would apply to all parties proposing tower construction near AM stations. The proposed rules would generally require an examination of the potential effects of tower construction on AM stations using a simplified version of the computer modeling methodology specified in new Section 73.151(c).

As a general matter, the Joint Commenters enthusiastically support the Commission’s effort to harmonize and update its rules for the protection of AM stations. Although these Comments suggest certain relatively minor adjustments or modifications to the proposed rules, the Joint Commenters believes that the new rules ultimately will both simplify and clarify the process of protecting AM broadcast stations whose antenna patterns can be adversely affected by the proximity of new towers or antennas. The Joint Commenters believe that the adoption of the proposed rules will reduce confusion among affected FCC licensees with respect to the proper procedures for the protection of AM broadcast stations, and that the proposed procedures will substantially reduce both the time required to determine the impact on the affected AM station

and the expense associated with that analysis. While the proposed rules will require some modest engineering analysis, they will reduce reliance on costly, time consuming, and ultimately ambiguous magnetic field strength measurements, and will eliminate the application of these expensive procedures to many unnecessary situations.

**I. Clarification of Measuring Point for Ascertaining Whether a Tower is in the Immediate Vicinity of an AM Station**

Under proposed Section 1.30002 (“Tower construction or modification near AM stations”), the proponent (the “Proponent”) of a new or modified tower that is within the “immediate vicinity” of an AM station must examine the potential effects of its proposed construction activity on that nearby AM station. A tower is in the immediate vicinity of a non-directional AM stations if it is “within one wavelength of the AM station, and is taller than 60 electrical degrees at the AM frequency ....” *See* Section 1.30002(a). A tower is in the immediate vicinity of a directional AM stations if it is “within the lesser of 10 wavelengths or 3 kilometers of the AM station, and is taller than 36 electrical degrees at the AM frequency ....” *See* Section 1.30002(b).<sup>4</sup>

While the Joint Commenters agree that new towers and significant modifications to existing towers that are in the immediate vicinity of an AM station, as determined by Section 1.30002(a) and (b), require both notification and analysis, the Joint Commenters believe that the new rules also should specify the measuring point from which those critical distances are to be calculated. The Joint Commenters suggest that the rules be modified to direct Proponents to use an AM station’s reference coordinates in making this determination because those reference

---

<sup>4</sup> The Commission sought comments on its tentative conclusion to reduce the tower height that triggers study and notification from 45 electrical degrees to 36 electrical degrees for towers near directional antennas. Second Further Notice at ¶ 20. The Joint Commenters note that they have no objection to this change.

coordinates are readily available in the Commission's CDBS AM database.<sup>5</sup> The Joint Commenters submit that this minor modification to its proposed rules will facilitate compliance with the new rules and will avoid unnecessary confusion in the determination of whether analysis is required.

## **II. Towers Subject to the New Rules and the Categorical Exemption for Antennas and Antenna Supporting Structures Located on Buildings**

The Joint Commenters agree with the Commission's proposal to apply the new rules to the construction of all communications towers above a specified height, as opposed to only towers requiring notice to the Federal Aviation Administration and tower registration under Part 17. In the event that the Commission chooses not apply these new rules to the owners of towers that do not require registration under Part 17 and on which no Commission licensee or applicant operates or proposes to operate, the Joint Commenters support the Commission's proposal to prohibit applicants from proposing and licensees from using a tower that would otherwise fall within the applicable distance and height criteria when its owner does not notify an AM station of upcoming construction activities and fails to detune that tower when it adversely affects the AM station's pattern.

The Joint Commenters also support the Commission's general proposal to exempt from analysis any addition to or modification of an antenna or antenna supporting structure that is located on a building. *See* proposed Section 1.30002(e). In fact, the Coalition proposed a similar exemption in its comments in this proceeding. However, the Joint Commenters believe that the exemption, as currently drafted, is overly broad. Significant tower structures can be mounted on

---

<sup>5</sup> For the convenience of the Commission, the Joint Commenters have included at Attachment B a revised version of the Commission's proposed rules reflecting the Joint Commenters' proposed changes. The Joint Commenters note that they have replaced the term "licensee" with the term "proponent" in Section 1.30002(a) and (b), which they believe more accurately reflects the intended allocation of responsibility under those sections.

buildings, and the Joint Commenters are aware of several instances where the height of a microwave or other type of tower actually exceeds the height of the building on which the tower is mounted. The Joint Commenters believe that these situations merit special consideration. For this reason, the Coalition's proposed rules required analysis where additions to or modifications of an antenna or support structure would increase the overall physical height of the building by more than 10 electrical degrees. The Joint Commenters believe that requiring analysis under these circumstances would better protect nearby AM stations from the effects of such construction.

### **III. Meaningful Notice to AM Stations of Nearby Construction Activities**

The Joint Commenters support the Commission's proposal that Proponents give at least 30 days prior notice of any construction or significant modification of a tower in the immediate vicinity of an AM station so that the AM licensee has the opportunity to perform its own impact assessment of the planned construction. However, the Joint Commenters believe that more detailed notice procedures are warranted and that the rules should allow Proponents to request expedited clearance when necessary.

In order to ensure that potentially affected AM station licensees are provided adequate information to perform their own assessment of the potential impact of the proposed construction project on their station's facilities, the Joint Commenters believe that the new rules should specify that construction notices should be in writing and should include the coordinates of the tower to be constructed or modified, a physical description of the planned structure, and if the required moment method analysis has already been performed, the results of that analysis. This more detailed written notification will enable the licensee of the affected AM station to more easily verify the Proponent's analysis without unnecessary duplication of work.

The Joint Commenters also believe that the notice provisions should accommodate, where possible, a Proponent's request for clearance of a construction project within less than 30 days. Such requests for expedited clearance could be handled in a manner similar to frequency coordination under Part 101 for the fixed microwave service. *See* Section 101.103(d). Specifically, where the Proponent delivers to a potentially affected AM station licensee a notice of construction that is identified as "expedited," the Proponent would be permitted to commence construction upon receipt from the potentially affected AM station licensee of either a written concurrence to the construction project, or a verbal concurrence that is followed by a written concurrence. *See* Section 101.103(d)(2)(vi). However, as is the case with frequency coordination requests under Part 101, where expedited clearance has not been requested, the Proponent may commence its planned construction if the potentially affected AM station licensee does not respond to the construction notice within the 30 day notice of construction period.

#### **IV. Credible Demonstrations of Interference Falling Outside the AM Antenna Protection Criteria**

The Commission has sought comment on its proposed Section 1.30002(g), which requires an entity (also referred to as a tower Proponent) that has completed construction of or modifications to a tower that falls outside the criteria specified in Section 1.30002(a) and (b) nevertheless to protect an AM station upon a credible demonstration that the tower construction or modification affects the AM station's pattern. Second Further Notice at ¶ 21. In proposing the new AM proximity rules, the Coalition's principal goals were to enhance the protection afforded to AM stations from nearby construction activities while at the same time providing greater certainty and predictability to both AM station licensees and tower Proponents. By specifying critical distances from an AM station in terms of wavelengths at the AM frequency

rather than fixed distances, the proposed rules provide a very conservative method of identifying AM stations that may be potentially affected by the construction or modification of a nearby tower. Similarly, moment method modeling was specified as the primary means of ascertaining the actual impact of such construction or modification because of its superior reliability compared to traditional field strength measurements. For these reasons, the Joint Commenters have a high degree of confidence that proper application of the new AM proximity rules will accurately identify and predict AM pattern disturbances in the vast majority of cases.

Nevertheless, as the Commission points out, “unusual circumstances” may arise where the construction or modification of a tower that is not within the established criteria, such as the construction of a tall tower located outside of the threshold distances, may adversely affect an AM station. Although the Joint Commenters generally support the Commission’s effort to address these potential – though unlikely – anomalies, they emphasize that any formal procedures adopted must not unduly undermine the ultimate goals the new rules are intended to achieve. Thus, broadcasters must recognize that they have an obligation to periodically monitor their AM station’s operations in order to identify in a timely fashion any potential pattern disturbances, and must overcome the presumption incorporated in the AM proximity rules that the construction or modification of a tower outside the rule parameters will have no adverse affect on the AM station. Similarly, tower proponents must acknowledge their ultimate responsibility to rectify pattern disturbances that in fact occur as a result of the construction or modification of a tower. In light of the foregoing, the Joint Commenters respectfully request that Section 1.30002(g) be modified in the following respects.

First, a demonstration of actual adverse impact on an AM station under Section 1.30002(g) should be supported either by a moment method analysis performed in accordance

with Section 73.151(c), as opposed to the simplified version of that analysis provided for in Section 1.30002(c), or in the case of an AM station authorized with a directional proof of performance, through field strength measurements. The Joint Commenters believe that providing AM stations with clear guidance on the necessary showing of adverse impact ultimately will facilitate compliance with the rule and will reduce the likelihood that tower Proponents will be forced to respond to adverse impact showings that rely on perhaps less reliable methodologies.

Second, tower Proponents should be afforded a reasonable opportunity to respond to any showing of adverse impact. Thus, a copy of any adverse impact showing should be provided to the appropriate tower Proponent. Adoption of this suggestion not only will ensure that the Commission has in its possession all information necessary to make an informed decision, but also will facilitate the expeditious resolution of meritorious adverse impact claims.

Finally, the Joint Commenters believe that Section 1.30002(g) should incorporate a reasonable time limit within which an AM station licensee may submit an adverse impact showing. Such a time limit would encourage AM station licensees to promptly identify potential pattern disruptions caused by the construction or modification of a nearby tower, and would provide the wireless industry with greater certainty with respect to future potential liabilities. The Joint Commenters believe that requiring the submission an adverse impact showing within two years of the date the subject tower was either constructed or modified is reasonable and provides AM station licensees sufficient time to ascertain that its pattern has been adversely affected, identify the source of the pattern disruption and prepare and submit an adverse impact showing. In addition, the Joint Commenters believe that it would be reasonable to require the AM station licensee to be responsible for the costs of the design of any necessary detuning

apparatus.

**V. Software to Ascertain Whether a Tower Proposal Falls within the AM Antenna Protection Criteria**

In their earlier filed comments in this proceeding, both LMCC and the Coalition have urged the that the FCC make available on its web site software similar to the TOWAIR program that would allow Proponents to determine if a proposed tower falls within the AM antenna protection criteria.<sup>6</sup> The Joint Commenters submit that making such software readily available will facilitate compliance with the new AM protection rules in several ways. First, a Proponent that uses the software is far less likely to make an error or simply fail to find a potentially affected AM station. The software would perform the station search and automatically provide a pass or fail determination for each potentially affected station. Second, the Commission's AM database utilizes NAD 27 coordinates, but the Commission's antenna registration system and Universal Licensing System utilize NAD 83 coordinates. As a consequence, there is a great likelihood that Proponents will either fail to perform the necessary coordinate conversions or will do so incorrectly. Having this function performed by the software eliminates chances for mistakes. Third, most Proponents have no expertise with complicated AM antennas, and are less familiar with AM engineering terminology, such as "electrical degrees." The software could automatically convert the physical height of the proposed antenna into electrical degrees at the broadcast station's frequency and convert wavelength into distance. This again would eliminate calculations by a Proponent that have a high probability for error. Finally, the software simplifies the procedure to the point that virtually anyone can determine the status of a tower simply by entering the proposed coordinates and physical height. Such a software program is a win-win solution for both broadcasters and Proponents. The Joint Commenters urge to the

---

<sup>6</sup> See LMCC Comments at 5-6; Coalition Reply Comments at 6-7.

Commission to make such a program available on its web site. The Coalition additionally will assist the Commission with the development of such software, if desired.

## **VI. Conclusion**

For the reasons set forth herein, the Joint Commenters urge the Commission to adopt uniform rules, applicable across all relevant service areas, for the protection of AM stations from the effects of nearby tower construction. Implementation of these rules, including the modifications and clarifications proposed herein, will improve protection afforded to AM stations, clarify the obligations of affected parties, and simplify the process of determining the impact of construction activities on nearby AM stations.

Respectfully submitted,

**AM DIRECTIONAL ANTENNA PERFORMANCE  
VERIFICATION COALITION**

By: /s/ John D. Poutasse  
John D. Poutasse

Lerman Senter PLLC  
2000 K Street, N.W., Suite 600  
Washington, DC 20006-1809  
(202) 429-8970

Its Attorneys

**THE LAND MOBLE COMMUNICATIONS  
COUNCIL**

By: s/s Al Ittner  
Al Ittner  
President

8484 Westpark Drive, Suite 630  
McLean, VA 22102  
(703) 528-5115

**THE WIRELESS COMMUNICATIONS  
ASSOCIATION INTERNATIONAL, INC.**

By: s/s Paul J. Sinderbrand  
Paul J. Sinderbrand

Wilkinson Barker Knauer, LLP  
2300 N Street, N.W., Suite 700  
Washington, DC 20037-1128  
(202) 783-4141

Its Attorneys

January 12, 2009

## **ATTACHMENT A**

### **AM DIRECTIONAL ANTENNA PERFORMANCE VERIFICATION COALITION**

#### **Broadcasters**

Beasley Broadcasting Group  
Bonneville International  
Buckley Radio  
CBS Radio Inc.  
Citadel Broadcasting Company  
Clear Channel Radio  
Cox Radio, Inc.  
Crawford Broadcasting Company  
Cumulus Media  
Emmis Communications Corp.  
Entercom Communications Corp.  
Entravision Communications Corporation  
Family Stations, Inc.  
Lincoln Financial Media  
Morris Communications Company, LLC  
Multicultural Radio Broadcasting, Inc.  
Peak Broadcasting LLC  
Regent Communications  
Saga Communications  
Salem Communications Corporation  
The Walt Disney Company

#### **Consulting Engineers/Equipment Manufacturers**

Carl T. Jones Corporation  
Cavell, Mertz & Associates  
Communications Technologies, Inc.  
DuTreil, Lindin & Rackley  
Edward A. Schober, P.E., Radiotechniques Engineering, LLC  
Graham Brock, Inc.  
Hammett & Edison, Inc.  
Hatfield & Dawson Consulting Engineers, LLC  
Khanna & Guill, Inc.  
Sellmeyer Engineering

## ATTACHMENT B

### JOINT COMMENTERS' RECOMMENDED REVISIONS TO PROPOSED PART 1 RULES

Subpart AA. Disturbance of AM broadcast station antenna patterns.

§ 1.30000 Purpose. This rule part protects the operations of AM broadcast stations from nearby tower construction which may distort the AM antenna pattern. All parties proposing to construct or make a significant modification to an antenna tower or support structure in the immediate vicinity of an AM antenna, or proposing to install an antenna on an AM tower, are responsible for measures necessary to correct disturbances of the AM radiation pattern, if such disturbances occurred as a result of the tower construction or modification.

§ 1.30001 Definitions. For purposes of this subpart:

(a) Wavelength at the AM frequency. In this subpart, critical distances from an AM station are described in terms of the AM wavelength. The AM wavelength, expressed in meters, is computed as follows:

$$(300 \text{ meters})/(\text{AM frequency in megahertz})=\text{AM wavelength in meters.}$$

For example, at the AM frequency of 1000 kHz, or 1 MHz, the wavelength is  $(300/1 \text{ MHz}) = 300$  meters.

(b) Electrical degrees at the AM frequency. This term describes the height of a proposed tower as a function of the frequency of a nearby AM station. To compute tower height in electrical degrees, first determine the AM wavelength in meters as described in paragraph (a). Tower height in electrical degrees is computed as follows:

$[(\text{Tower height in meters})/\text{AM wavelength in meters}] \times 360 \text{ degrees} = \text{Tower height in electrical degrees.}$

For example, if the AM frequency is 1000 kHz, then the wavelength is 300 meters, per paragraph (a). A nearby tower 75 meters tall is therefore  $[75/300] \times 360 = 90$  electrical degrees tall at the AM frequency.

(c) Proponent. The term proponent refers in this section to the party proposing tower construction or modification.

§1.30002 Tower construction or modification near AM stations.

(a) Construction near a nondirectional AM station. Proponents of construction or significant modification of a tower which is within one wavelength of the reference coordinates specified on the AM station's authorization, and is taller than 60 electrical degrees at the AM frequency, must notify the AM station in advance in accordance with the procedures described in § 1.30004. The proponent shall examine the potential impact of the construction or modification as described in paragraph (c). If the construction or modification would distort the radiation pattern by more than 2 dB, the proponent shall be responsible for the installation and maintenance of any detuning apparatus necessary to restore proper operation of the nondirectional antenna.

(b) Construction near a directional AM station. Proponents of the construction or significant modification of a tower which is within the lesser of 10 wavelengths or 3 kilometers of the reference coordinates specified on the AM station's authorization, and is taller than 36 electrical degrees at the AM frequency, must notify the AM station in advance in accordance with the procedures described in § 1.30004. The proponent shall examine the potential impact of the construction or modification as described in paragraph (c). If the construction or modification would result in radiation in excess of the AM station's licensed standard pattern or augmented standard pattern values, the proponent shall be responsible for the installation and maintenance of any detuning apparatus necessary to restore proper operation of the directional antenna.

(c) Proponents of construction or significant modification of a tower within the distances defined in (a) and (b) herein of an AM station shall examine the potential effects thereof using a moment method analysis. The moment method analysis shall consist of a model of the AM antenna together with the potential reradiating tower in a lossless environment. The model shall employ a simplified version of the methodology specified in § 73.151(c) of this chapter. The AM antenna elements may be modeled as a series of thin wires driven to produce the required radiation pattern, without any requirement for measurement of tower impedances.

(d) A significant modification of a tower in the immediate vicinity of an AM station is defined as follows:

(1) Any change that would alter the structure's physical height by 5 electrical degrees or more at the AM frequency.

(2) The addition of one or more antennas or a transmission line to a tower that has been detuned or base-insulated.

(e) The addition or modification of an antenna or antenna supporting structure on a building shall not be considered significant unless such addition or modification increases the overall physical height of the building by more than 10 electrical degrees.

(f) With respect to an AM station that was authorized pursuant to a directional proof of performance based on field strength measurements, the proponent of the tower construction or modification may, in lieu of the study described in paragraph (c), demonstrate through measurements taken before and after construction that field strength values at the monitoring points do not exceed the licensed values. In the event that the pre-construction monitoring point values exceed the licensed values, the proponent may demonstrate that post-construction monitoring point values do not exceed the pre-construction values. Alternatively, the AM station may file for authority to increase the relevant monitoring point value after performing a partial proof of performance in accordance with § 73.154 to establish that the licensed radiation limit on the applicable radial is not exceeded.

(g) Tower construction or modification that falls outside the criteria described in the preceding paragraphs is presumed to have no significant effect on an AM station. In some instances, however, an AM station may be affected by tower construction notwithstanding the criteria set forth above. In such cases, an AM station may submit a showing using the methodology specified in § 73.151(c) that its operation has been affected by tower construction or alteration, except that an AM station that was authorized pursuant to a directional proof of performance based on field strength measurements may instead use the methodology described in paragraph (f). Any such showing must be submitted to the Commission no later than two years from the

date the tower was constructed or last modified, whichever is later. A copy of such showing shall be provided to the tower proponent at the time of its submission to the Commission. If substantiated by the Commission after considering any input submitted by the tower proponent, the Commission shall direct the tower proponent to install and maintain any detuning apparatus necessary to restore proper operation of the AM antenna. The AM station shall be responsible for the cost of the electrical design of an appropriate detuning apparatus. The tower proponent shall be responsible for the cost of implementing, installing and maintaining that detuning apparatus.

§ 1.30003. Installations on an AM antenna.

(a) Installations on a nondirectional AM tower. When antennas are installed on a nondirectional AM tower the AM station shall determine operating power by the indirect method (see §73.51). Upon the completion of the installation, antenna impedance measurements on the AM antenna shall be made. If the resistance of the AM antenna changes, an application on FCC Form 302-AM (including a tower sketch of the installation) shall be filed with the Commission for the AM station to return to direct power measurement. The Form 302-AM shall be filed before or simultaneously with the filing of any license application covering a broadcast station installation.

(b) Installations on a directional AM array. Before antennas are installed on a tower in a directional AM array, the proponent shall notify the AM station so that, if necessary, the AM station may determine operating power by the indirect method (see § 73.51) and request special temporary authority pursuant to § 73.1635 to operate with parameters at variance in order to maintain monitoring point field strengths within authorized limits. For AM stations licensed via field strength measurements (see § 73.151(a)), a partial proof of performance (as defined by § 73.154) shall be conducted both prior to the commencement of construction and upon completion of construction to establish that the AM array has not been adversely affected. For AM stations licensed via a moment method proof (see § 73.151(c)), the proof procedures set forth in § 73.151(c) shall be repeated. The results of either the partial proof of performance or the moment method proof shall be filed with the Commission on Form 302-AM before or simultaneously with any broadcast license application associated with the installation.

§ 1.30004. Notice of tower construction or modification near AM stations.

(a) Notifications to an AM station, and any responses, may be oral or in written form. If such notification and/or response is oral, the party providing such notification or response must supply written documentation of the communication upon request. Notifications must include relevant technical details of the proposed tower construction or modification. At a minimum, this should include the following:

- Proponent's name and address
- Coordinates of the tower to be constructed or modified
- Physical description of the planned structure
- Results of the examination, if performed

(b) Response to notification should be made as quickly as possible, even if no technical problems are anticipated. Any response to notification indicating a potential disturbance of the AM radiation pattern must specify the technical details and must be provided to the proponent within 30 days. If no response to notification is received within the 30-day notification period,

the proponent may proceed with the proposed tower construction or modification.

(c) The 30-day notification period is calculated from the date of receipt of the notification by the AM station. If notification is by mail, this date may be ascertained by:

- (1) The return receipt on certified mail;
- (2) The enclosure of a card to be dated and returned by the recipient; or
- (3) A conservative estimate of the time required for the mail to reach its destination, in which case the estimated date when the 30-day period would expire shall be stated in the notification.

(d) An expedited notification period (less than 30 days) may be requested when deemed necessary by the proponent. The notification shall be identified as “expedited” and the requested response date shall be clearly indicated. The proponent may proceed with the proposed tower construction or modification prior to the expiration of the 30-day notification period only upon receipt of written concurrence from the affected AM station (or verbal concurrence, with written to follow).