OMB Control Number: 3060-XXXX **December 2008**
Sections 1.30002 and 1.30003,
Disturbance of AM Broadcast Station Antenna Patterns

SUPPORTING STATEMENT

A. Justification:

1. On September 24, 2008, the Commission adopted the *Second Report and Order and Second Further Notice of Proposed Rulemaking* in the matter of An Inquiry Into the Commission's Policies and Rules Regarding AM Radio Service Directional Antenna Performance Verification, MM Docket No. 93-177, FCC 08-228. The *Second Further Notice of Proposed Rulemaking* proposes new rules concerning tower construction near AM stations.

In AM radio, the tower itself functions as the antenna. Consequently, a nearby tower may become an unintended part of the AM antenna system, reradiating the AM signal and distorting the authorized AM radiation pattern. Thus, our rules contain several sections concerning tower construction near AM antennas that are intended to protect AM stations from the effects of such tower construction., specifically, Sections 73.1692, 22.371, and 27.63. These existing rule sections 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. Other rule parts, such as Part 90 and Part 24, entirely lack provisions for protecting AM stations from possible effects of nearby tower construction. The proposed new rules would consolidate existing rules regarding tower construction near AM stations, and would also incorporate moment method techniques in the analysis of the impact of nearby structures on the AM station.

Proposed New Information Collection Requirements:

47 C.F.R. 1.30002(a) requires a proponent of construction or alteration of a tower within a specified distance of a nondirectional AM station, and also exceeding a specified height, to notify the AM station at least 30 days in advance of the construction or alteration. If the tower construction or alteration would distort the AM pattern, the proponent shall be responsible for the installation and maintenance of detuning equipment.

47 C.F.R. 1.30002(b) requires a proponent of construction or alteration of a tower within a specified distance of a directional AM station, and also exceeding a specified height, to notify the AM station at least 30 days in advance of the construction or alteration. If the tower construction or alteration would distort the AM pattern, the proponent shall be responsible for the installation and maintenance of detuning equipment.

47 C.F.R. 1.30002(c) states that proponents of tower construction or alteration near an AM station shall use moment method modeling, described in § 73.151(c), to determine the effect of the construction or alteration on an AM radiation pattern.

47 C.F.R. 1.30002(f) states that, 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 *§* 1.30002 (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.

47 C.F.R. 1.30002(g) states that tower construction or modification that falls outside the criteria described in paragraphs §1.30002(a) and (b) 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 in paragraphs §1.30002(a) and (b). In such cases, an AM station may submit a showing that its operation has been affected by tower construction or alteration. If necessary, the Commission shall direct the tower proponent to install and maintain any detuning apparatus necessary to restore proper operation of the AM antenna.

47 C.F.R. 1.30003(a) states that 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.

47 C.F.R. 1.30003(b) requires that, 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.

As noted on the OMB Form 83-I, this information collection does not affect individuals or households; thus, there are no impacts under the Privacy Act.

Statutory authority for this collection of information is contained in Section 154(i) of the Communications Act of 1934, as amended.

2. AM stations are licensed by the Commission with specific antenna patterns which control interference between stations and assure adequate community coverage. Construction or alteration of towers near AM stations may distort the licensed AM radiation pattern. The data is used by engineers to determine whether nearby tower construction would distort an AM radiation pattern and, therefore, whether the tower requires detuning at the AM frequency.

3. Most, if not all, respondents are using electronic engineering programs to reduce the burden of calculating technical information. The use of information technology may assist respondents with the notification requirements included in this collection.

4. This information collection replaces three similar but conflicting rules. There is no similar data available.

5. In conformance with the Paperwork Reduction Act of 1995, the Commission is making an effort to minimize the burden on all respondents. Therefore, this collection of information will not have a significant economic impact on small entities/businesses.

6. The frequency for this collection of information is determined by the frequency of construction or alteration of towers in the vicinity of AM radio stations.

7. This collection of information is consistent with the guidelines in 5 CFR 1320.5(d)(2).

8. The Commission is in the process of publishing a Notice in the Federal Register seeking public comment for the proposed information collection requirements contained in this collection.

9. No payment or gift was provided to the respondents.

10. There is no need for confidentiality with this collection of information.

11. This information collection does not address any private matters of a sensitive nature.

12. We estimate 1,040 tower proponents annually will collect the information described herein. An in-house engineer and/or an in-house attorney will complete some of these information collection requirements.[1] The estimated salary for the in-house engineer is $22/hour and for the salary for the in-house attorney is an average salary of $40/hour.

Rule Sections	**Est. Number of Responses**	**Est. Hours for In-house Engineer or Attorney**	**Total Annual Burden Hours**	**Hourly "In-House" Cost**	**Total "In-House" Costs**
Section 1.30002(a) (determine whether notification is required)	---	---	200 hours[2]	$22/hr.	$4,400
Section 1.30002(a) (Letter notification)	200	1 hour	200 hours	$40/hr.	$8,000
Section 1.30002(b) (determine whether notification is required)	---	---	400 hours[3]	$22/hr.	$8,800
Section 1.30002(b) (Letter notification)	400	1 hour	400 hours	$40/hr.	$1,600

[1] A consultant engineer and attorney are also needed to complete some of the requirements that in-house staff worked on (see the chart under question 13 for a complete listing).

[2] It will take the in-house engineer a total of 200 hours to determine if notifications are needed pursuant to Section 1.30002(a).

[3] It will take the in-house engineer a total of 400 hours to determine if letter notifications are needed pursuant to Section 1.30002(b).

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Rule Sections	Est. Number of Responses	Est. Hours for In-house Engineer or Attorney	Total Annual Burden Hours	Hourly "In-House" Cost	Total "In-House" Costs
Section 1.30002(c)	300	1 hour	300 hours	$22/hr.	$6,600
Section 1.30002(f)	100	1 hour	100 hours	$22/hr.	$2,200
Section 1.30002(g)	10	1 hour	10 hours	$22/hr.	$220
Section 1.30003(a)	20	2 hours	40 hours	$22/hr.	$880
Section 1.30003(b)	10	2 hours	20 hours	$22/hr.	$440
Totals:	**1,040 Responses**		**1,670 Hours**		**$33,140 In-House Cost**

These estimates are based on FCC staff's knowledge and familiarity with the availability of the data required.

Total Number of Annual Respondents: 1,040

Total Number of Annual Reponses: 1,040

Total Annual Burden Hours: hours 1,670 Hours

Total Annual In-house Cost: $ 33,140

13. **Annual Cost Burden:** The respondent will use a consulting engineer for some measurements and a consultant attorney for submission of information to the FCC. We estimate the consulting engineer's salary is $150/hour and the attorney salary is $200/hour.

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Rule Sections	Est. Number of Responses	Est. Hours for Engineer/Attorney	Hourly Cost	Annual Costs Burden
Section 1.30002(a) (Detuning)	10	40 (engineer)	$150/hour	$60,000
Section 1.30002(b) (Detuning)	20	40 (engineer)	$150/hour	$120,000
Section 1.30002(c)	300	2 hours (engineer)	$150/hour	$90,000
Section 1.30002(f) (measurements)	100	16 hours (engineer)	$150/hour	$240,000
Section 1.30002(f) (increase monitor point values)	5	20 hours (engineer)	$150/hour	$15,000
Section 1.30002(f) (increase monitor point values)	5	5 hours (attorney)	$200/hour	$5,000
Section 1.30002(g)	10	5 hours (engineer)	$150/hour	$7,500
Section 1.30002(g)	10	2 hours (attorney)	$200/hour	$4,000
Section 1.30003(a) (impedance measurements)	20	8 hours (engineer)	$150/hour	$24,000
Section 1.30003(a) (Form 302-AM)	2	5 hours (engineer)	$150/hour	$1,500
Section 1.30003(a) (Form 302-AM)	2	2 hours (attorney)	$200/hour	$800
Section 1.30003(b) (measurements and Form 302-AM)	10	20 hours (engineer)	$150/hour	$30,000
Section 1.30003(b) (measurements and Form 302-AM)	10	2 hours (attorney)	$200/hour	$4,000
Total Annual Cost Burden				**$601,800**

Total Annual Cost Burden: $601,800

14. **Cost to the Federal Government:** The Commission will use an engineer at the GS-12 step 5 level, $37.89/hour and a clerk at the GS-7 step 5 level, $21.36/hour to review and process information collections. The average processing times will range from 0.25 – 16 hours.

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Rule Sections	FCC Staff Review Time	Reviewer	Hourly Salary	Number of Reviews	Cost to Federal Government
Section 1.30002(f) (increase monitor point values)	0.25 hours 8 hours	Clerk Engineer	$21.36 $37.89	5 5	$ 26.70 $ 1,515.60
Section 1.30002(g)	0.25 hours 16 hours	Clerk Engineer	$21.36 $37.89	10 10	$ 53.40 $ 6,062.00
Section 1.30003(a) (Form 302-AM)	0.25 hours 16 hours	Clerk Engineer	$21.36 $37.89	2 2	$ 10.68 $ 1,212.48
Section 1.30003(b)	0.25 hours 16 hours	Clerk Engineer	$21.36 $37.89	10 10	$ 53.40 $ 6,062.40
TOTAL:					**$ 14,996.66**

Total Cost to the Federal Government: $ 14,996.66

15. On September 24, 2008, the Commission adopted the *Second Report and Order and Second Further Notice of Proposed Rulemaking* in the matter of An Inquiry Into the Commission's Policies and Rules Regarding AM Radio Service Directional Antenna Performance Verification, MM Docket No. 93-177, FCC 08-228. The *Second Further Notice of Proposed Rulemaking* proposes new rules concerning tower construction near AM stations. Due to the adoption of the proposed new rules the Commission has a program change of +1,670 hours and +$601,800 total cost burden. There are no adjustments to this information collection.

16. The data will not be published.

17. OMB approval of the expiration of the information collection will be displayed at 47 C.F.R. Section 0.408.

18. There are no exceptions to the Certification Statement in Item 19.

B. Collections of Information Employing Statistical Methods:

No statistical methods are employed.