

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of)	
)	
Amendment of the Commission's Rules Concerning Maritime Communications)	PR Docket No. 92-257
)	
Petition for Rule Making Filed By RegioNet Wireless License, LLC)	RM 9664
)	

To: The Commission

COMMENTS OF KM LPTV OF CHICAGO-13, L.L.C.

KM LPTV of Chicago-13, L.L.C. ("KM"), licensee of Class A television station WOCK-CA, Channel 13, Chicago, Illinois ("WOCK"), by its counsel, and pursuant to Section 1.415 of the Commission's rules, 47 C.F.R. § 1.415, respectfully submits these Comments in response to the Third Further Notice of Proposed Rule Making ("Third FNPRM") in the above-captioned proceeding.^{1/}

I. Introduction

1. KM (or a commonly-owned predecessor) has owned and operated television station WOCK on Channel 13 in Chicago since 1994, initially as a secondary Low Power Television

^{1/} See Amendment of the Commission's Rules Concerning Maritime Communications, PR Docket No. 92-257 and RM-9664, Fourth Report and Order and Third Further Notice of Proposed Rule Making, FCC 00-370 (released November 16, 2000). Comments are due within 60 days after publication of notice of the Third FNPRM in the Federal Register, which occurred on December 13, 2000, see 65 Fed. Reg. 778211 (December 13, 2000), or by February 12, 2001; therefore, these Comments are timely-filed.

(“LPTV”) station and now as a primary Class A television station. WOCK’s programming includes locally-produced and other ethnic and foreign language programming, including a daily locally-produced Korean-language newscast that serves the needs and interests of a large Korean community in Chicago.

2. Over the last several years KM has had to battle to protect the integrity of WOCK’s signal from the potential for interference from proposals for new Automated Maritime Telecommunications System (“AMTS”) stations. On several occasions, applications for new AMTS stations were filed which predicted interference to areas within WOCK’s service area that encompassed up to millions of persons, which KM successfully opposed.^{1/} However the last application, which predicted interference to a total of 2,140,515 persons within WOCK’s protected service area, was even granted, over KM’s strenuous objections.^{1/}

^{2/} See Amendment of the Commission’s Rules Concerning Maritime Communications, PR

^{3/} See RegioNet Wireless License, LLC (Chicago and Lockport, Illinois), Order, DA 00-1356, 15 FCC Rcd 11013 (Public Safety and Private Wireless Division, released November 16, 2000) (“RegioNet Chicago/Lockport”).

3. Fortunately, in one case the potential for interference was minimized when the AMTS applicant agreed to co-locate its proposed AMTS station with WOCK on top of the John Hancock Building and also directionalize and/or reduce power to a level sufficient to minimize the potential for AMTS interference to WOCK. Another case was resolved when the parties entered into a consent agreement, which was only made possible after KM was able to increase the effective radiated power (“ERP”) of WOCK (due to a rule change) such that potential interference would be avoided. KM remains concerned, however, that other AMTS applicants may not agree to take such simple steps to minimize interference, especially with the frightening precedent of the RegioNet Chicago/Lockport decision, which suggests that new AMTS proposals may be granted despite predicted interference to over 2 million persons within an established television Channel 13 station’s protected service area. Accordingly, KM is an interested party and is submitting these Comments in this proceeding.

II. The Commission Must Continue To Require New AMTS Stations To Protect Existing Television Channel 10 And Channel 13 Broadcast Stations

4. The Commission requests comment on several specific issues related to the engineering studies that applicants for new AMTS authorizations must submit to demonstrate how harmful interference to existing television Channel 10 and Channel 13 stations will be avoided. See Third FNPRM at ¶¶ 45-49. KM would like to submit a few observations on the means by which it has found that AMTS applicants may accomplish this goal.

5. The key factor in avoiding harmful interference, in KM’s view, is ensuring that the signal strength of the established television Channel 13 (or Channel 10) station exceeds the potential interfering AMTS signal *at all points* within the television station’s protected service contour. In the

simplest case, where both the television station and the AMTS station employ nondirectional (or “omnidirectional”) antennas, this may be accomplished by collocation of the antennas at a common transmitter site and ensuring that the ERP of the television station equals or exceeds the ERP of the AMTS station.

6. Collocation alone is not sufficient, however, when the television station uses a directional antenna pattern; in that case, in order to minimize harmful interference the AMTS station should be required: (i) to use a directional antenna with the same (or very similar) pattern as the television station, again with the ERP of the television station equaling or exceeding the ERP of the AMTS station; or (ii) if the AMTS station proposes to use a nondirectional antenna, or a directional antenna with a pattern that does not match up with the television station’s directional pattern, the ERP of the television station must equal or exceed the ERP of the AMTS station *in all directions* within the television station’s protected contour (i.e., not just in the direction of the main lobe of the television station’s antenna). Another way of stating this last proposal is that a nondirectional AMTS station’s ERP must not exceed the minimum ERP of a co-located directional television station on any azimuth (but still within the television station’s protected contour).

7. In the latter case, this should be intuitive to any engineer - - the field strength of the signal of a nondirectional AMTS station that operates with the same ERP as a co-located directional television station is going to exceed the field strength if the television signal in every direction other than along the main lobe(s) of the directional television station’s antenna pattern. But since the Commission failed to recognize this problem in the RegioNet Chicago/Lockport case,^{4/} KM remains

^{4/} See RegioNet Chicago/Lockport at ¶ 3. The Commission’s statement in that paragraph of KM’s position on the matter is incorrect, and was not supported by any statement from KM, nor by the Commission’s citation. KM’s concerns in that particular case were resolved by a mutual

concerned for the potential for similar AMTS proposals which may rely on this precedent, unless the Commission takes corrective action.

III. Co-Channel Interference Protection Standards For AMTS Stations

8. The Commission tentatively concluded that it should adopt the co-channel interference protection standards from the 220 MHz band, which requires licensees to locate their base stations at least 120 kilometers from the base stations of co-channel incumbents or else provide 10 dB protection to an incumbent's contour, but sought comment on alternate proposals. See Third FNPRM at ¶ 35. One such alternate proposal was to use the 12 dB ratio of desired to undesired signal strength used for VHF public coast stations. Id. KM supports the stronger restriction of the 12 dB ratio, since the co-channel protection to incumbent AMTS stations will secondarily serve to protect television Channel 13 stations that are co-located with incumbent AMTS stations.

agreement of the parties, which was made possible only after a change in the Commission's rules permitted WOCK to increase its ERP, and therefore the field strength of its signal in directions away from the orientation of the main lobes of its direction antenna, to a level sufficient to preclude harmful interference from the AMTS proposal.

IV. Geographic-Area (And Incumbent) AMTS Licensees Must Continue To Protect Television Channel 10 And Channel 13 Broadcast Stations

9. KM supports the Commission's proposal to require AMTS geographic-area licensees to individually license base stations that may require notification to potentially affected television Channel 10 or Channel 13 stations. Id. at ¶ 39. KM has found this notification vital to its efforts to protect WOCK from the potential for harmful interference.

10. The Commission also offers a clarification of the "only suitable location" requirement, for any AMTS applicant proposal to locate an AMTS station close enough to a television Channel 10 or Channel 13 station that notification is required. Id. at ¶ 40. The Commission suggests that at the application stage, the applicant need only show that its proposed transmitter site is "especially suitable", at least until such time that the AMTS proposal is opposed. Id. KM disagrees with the Commission, since this clarification in effect inappropriately shifts the burden under Section 80.215(h)(3) of the Commission's rules, 47 C.F.R. § 80.215(h)(3), of proposing a plan to minimize the proposed AMTS station's potential for harmful interference to television stations, from the AMTS applicant to the television station.

11. The burden should properly be on the AMTS applicant in the first instance, under Section 80.215(h)(2), to propose a new AMTS station that does not interfere with television Channel 10 or Channel 13 stations. Second, if the AMTS proposal is predicted to cause interference to 100 or more residences within a television Channel 10 or Channel 13 station's protected service area, then the burden should properly remain on the AMTS applicant to present a plan that best eliminates or at least minimizes the potential for harmful interference. The choice of the transmitter site, and especially collocation, coupled with a proper matching of the directionalization and/or power of the AMTS antenna to the television station's facilities, is most likely going to best minimize predicted

harmful interference. The burden should not be placed on the existing television station to monitor for and object to a string of poorly engineered AMTS proposals, until the AMTS applicant can get an application through the Commission, but rather should be in the AMTS applicant to submit a properly engineered proposal in the first place.

12. The Commission proposes to maintain the current requirement that an AMTS licensee that causes actual interference to a television station's reception must remedy the interference or discontinue operation. Id. KM agrees with the Commission that this requirement remains necessary, and indeed may prove even more necessary as AMTS moves to geographic-area "blanket" licensing, when AMTS stations generally may be constructed without prior Commission review of engineering studies for individual AMTS base stations.

V. The Commission Should Continue To Require Engineering Studies, And Ensure Some Minimum Guidelines For Their Preparation

13. KM is heartened by the Commission's position that AMTS applicants should continue to submit engineering studies that demonstrate that harmful interference will not be caused to television Channel 10 and Channel 13 stations. Id. at ¶ 47. KM is also not concerned by the Commission's clarification that interference analysis methods other than the "Eckert Report" methodology may be used, id., but KM is concerned that the Commission does not plan to set some type of guidelines for the methods of interference analysis that may be used, based on the Commission's own (or an independent) engineering analysis. KM also agrees with the Commission, and appreciates the Commission's findings and express concurrence with KM's assertions, that the Hull and Davidson studies prepared for and submitted by RegioNet Wireless License, LLC ("RegioNet") are flawed. Id. at n.186.

14. As KM has expressed previously in this proceeding, KM would prefer to see any changes in the AMTS interference protection or engineering study requirements to be developed by the Commission, by its independent engineers and analysis, rather than based on anecdotal studies with flawed assumptions prepared at the direction of AMTS interests, such as the Hull and Davidson studies. Similarly, KM is concerned that the Commission may leave the methods that may be used to demonstrate no AMTS interference to television stations completely open ended, which KM believes may invite the use of flawed methods. KM urges the Commission to establish some form of guidelines for the interference analysis methods that would be appropriate, or perhaps to name specific means of analysis as examples of methods that would clearly be acceptable.

15. Specifically, KM proposes that the Commission should modify the Longley-Rice terrain dependent propagation model (as described in Office of Engineering and Technology, or "OET", Bulletin 69) for use for analysis of potential interference by AMTS stations to television stations. The Longley-Rice/OET Bulletin 69 model is the method required for analysis of interference for digital television ("DTV") and is also commonly used for interference analysis with analog television stations, and could be readily modified by the Commission for use with AMTS by allowing the engineering parameters - - ERP, geographic coordinates and antenna height above average terrain ("HAAT") - - of the specific AMTS station(s) involved to be added for specific studies. The Commission staff and engineering consultants have experience with this interference analysis model, so its adaption for use with AMTS station studies makes perfect sense.

VI. AMTS Plans For Minimizing Or Controlling Interference To Television Stations Must Continue To Be Commensurate With The Level Of Interference Predicted

16. Established Commission precedent requires that where an application for an AMTS station is predicted to cause harmful interference to 100 or more residences within a television Channel 10 or 13 station's protected contour, the application may be granted "*only under exceptional circumstances, and that the stringency of the plan to control interference ... be commensurate with the number of potentially affected residences.*"^{5/} The Commission should confirm that this important principle and precedent from San Clemente will continue to be followed, or even codify it as a rule. The Commission has long recognized, in San Clemente as well as other decisions, that higher levels of effort may be required to prevent and control potential interference as the number of potentially adversely affected residences increases. A plan to control interference that may be suitable when 200 residences may be involved may not be suitable if 20,000 residences are involved, and a plan suitable for 20,000 residences may not be suitable if 200,000 residences are involved.

^{5/} See, e.g., Fred Daniel d/b/a Orion Telecom (San Clemente), 13 FCC Rcd 15446, 15451 (Public Safety and Private Wireless Division, 1998)(*emphasis* added; hereinafter, "San Clemente") (citing Amendment of Parts 2, 81 and 83 of the Commission's Rules to Allocate Spectrum for an Automated Inland Waterways Communications System (IWCS) Along the Mississippi River and Connecting Waterways, 84 FCC 2d 875, 897 (1981)).

17. KM agrees with the Commission that notification to or a survey of “a pre-determined number of residences”, such as the 10 to 100 residences suggested by RegioNet, is not the appropriate approach. See Third FNPRM at ¶ 49. As KM has expressed before, and as the “commensurate” aspect of San Clemente suggests, the notification to or survey of potentially affected residences must be in terms of some percentage of the potentially affected residences. KM also submits that it should be some fairly high percentage of the population within the service areas where interference is predicted, especially close in to (for example, within 5 miles of) the AMTS and/or television transmitter site. Specifically, KM proposes that an AMTS applicant should notify every (i.e., 100%) of the residences or population predicted to receive interference within 5 miles of a television Channel 10 or Channel 13 station, and either 50% of the residences or population predicted to receive interference or (at the affected television station’s option) all known viewers identified by the television station beyond that 5 mile radius. A strenuous notification/survey requirement would serve the public interest by adding an incentive for AMTS stations to engineer their proposals to best minimize the potential for harmful interference to television stations.^{6/}

18. A notification and/or survey plan would also be much more effective if it were targeted toward known viewers of the television station (which most broadcast stations can identify), and if viewers are directed to notify the television station of any interference (since it is the television station, not the AMTS licensee, that has the incentive to protect its signal from actual interference). Use of a percentage of residences within the predicted interference area, rather than some fixed number of notifications or surveys, solves the Commission’s concerns for unnecessarily burdening

^{6/} KM notes that the requirement for AMTS stations to remedy actual interference may not be the best deterrent since AMTS stations can count on many potential viewers to simply change channels when interference occurs rather than bother to complain about the interference.

AMTS stations that have properly limited the number of potentially affected residences, since with a percentage the number to be notified or surveyed would necessarily vary in a manner “commensurate” with the size of the predicted interference problem.

VII. Conclusion

19. WHEREFORE, the above premises being considered, KM respectfully requests that the Commission adopt interference protection and licensing rules for the AMTS service that are consistent with these Comments submitted by KM, to ensure the continued protection of television Channel 10 and Channel 13 broadcast stations from potentially harmful interference.

Respectfully submitted,

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February 12, 2001