

# SIRIUS SATELLITE RADIO INC. XM RADIO INC.

March 22, 2002

**Via Electronic Filing**

Mr. William F. Caton  
Acting Secretary  
Federal Communications Commission  
445 12th Street, S.W.  
Washington, D.C. 20554

**Re: *Ex Parte* Presentation  
IB Docket No. 95-91**

Dear Mr. Caton:

Several WCS licensees persist in arguing that whether the power levels of satellite radio repeaters is at 2 kW or 40 kW (or somewhere in between) is relevant to protecting WCS licensees from interference. The fundamental error in their argument is that if the WCS licensees design their receivers using inexpensive, standard techniques, similar to those used by XM and Sirius to protect their own receivers, the WCS receivers will be impervious to interference from satellite radio repeaters, regardless of whether the repeaters operate at anywhere between 2 kW and 40 kW eirp and without degradation of their performance.

To the extent the WCS licensees insist on not using such standard techniques as front-end RF AGC in their receivers, they should be required to absorb the consequences themselves, for the following reasons:

- The cost of incorporating RF AGC into WCS receivers is potentially pennies per unit and never more than a few dollars.<sup>1</sup>
- In comparison, requiring satellite radio licensees to re-engineer and re-deploy their repeater networks using lower power repeaters would reduce the quality of satellite radio service in urban areas and would cost several hundred million

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<sup>1</sup> See Letter from XM Radio and Sirius to William F. Caton, FCC, IB Docket No. 95-91 (March 11, 2002) (noting RF AGC as an integrated chip solution is available at no additional cost); Reply Comments of XM Radio Inc., IB Docket No. 95-91, File No. SAT-STA-20010712-00063, Attachment A (“XM Radio August 2001 White Paper”) (Aug. 31, 2001), at 2 (noting that RF AGC for a discrete implementation costs less than \$5 per consumer unit).

dollars, depending upon the power level required.<sup>2</sup> All of these costs would be the direct result of the WCS licensees' delay in raising any concerns about satellite radio repeater power levels, well after both the Commission's deadlines for comment and when the satellite radio operators had to commit to repeater equipment and network designs.<sup>3</sup>

- The additional repeaters required to compensate for the loss of a few higher-power repeaters will themselves cause "exclusion zones" for poorly-designed WCS receivers; the net effect on WCS licensees will be much worse if satellite radio repeaters are precluded from operating at higher powers in appropriate cases.<sup>4</sup>
- The "exclusion zones" for poorly-designed WCS receivers can be several square miles around even a 2 kW satellite radio repeater.<sup>5</sup>

Please direct any questions regarding this matter to the undersigned.

Very truly yours,

\s\Carl R. Frank

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<sup>2</sup> See XM Radio *Ex Parte* Presentation to the Office of Engineering and Technology, IB Docket No. 95-91, at 16 (March 5, 2002) ("XM Radio March 1 2002 OET Presentation"); XM Radio *Ex Parte* Presentation to the Office of Engineering and Technology, IB Docket No. 95-91, at 16 (March 12, 2002).

<sup>3</sup> See Letter from Lon C. Levin, XM Radio, to Donald Abelson and Thomas Sugrue, FCC, IB Docket No. 95-91 (August 7, 2001).

<sup>4</sup> See XM Radio August 2001 White Paper at 15-20; XM Radio *Ex Parte* Presentation, IB Docket 95-91 (Sept. 24, 2001) ("XM Radio September 2001 White Paper Supplement"), at 17-18; XM Radio March 1 2002 OET Presentation at 13-15.

<sup>5</sup> See XM Radio August 2001 White Paper at 16 (noting 7.1 mile exclusion zone for WCS receiver from a 2 kW EIRP SDARS repeater or WCS base station).

Mr. William F. Caton

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