

# SIRIUS XM

RADIO INC.

1500 Eckington Place, N.E.  
Washington, D.C. 20002  
Tel: 202-380-4000  
Fax: 202-380-4500  
www.sirius.com  
www.xmradio.com

November 20, 2008

Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 12th Street, SW  
Washington, DC 20554

Re: Notice of *Ex Parte* Presentation  
IB Docket No. 95-91  
WT Docket No. 07-293

Dear Ms. Dortch:

On November 19, 2008, Sirius XM Radio Inc. (“Sirius XM”) met with FCC staff to discuss issues associated with the above-captioned proceedings, in which the Commission has proposed adopting final rules for satellite radio terrestrial repeater operation and changing Wireless Communications Services (“WCS”) technical and operational requirements.

Those present at the meeting were myself, Craig Wadin and Terry Smith of Sirius XM, and Bob Pettit, Mike Lewis (engineering advisor) and Carl Frank of Wiley Rein, LLP, on behalf of Sirius XM. Participants from the FCC were Helen Domenici, Rod Porter, Bob Nelson and Steven Spaeth from the International Bureau, Pat Forster from the Office of Engineering and Technology, and Joel Taubenblatt, David Hu and Richard Arsenault from the Wireless Telecommunications Bureau.

During the meeting, Sirius XM discussed its most recent technical analysis on the potential for interference to satellite radio receivers from WCS mobile handsets.<sup>1</sup> Sirius XM reiterated its position that mobile WCS use on frequencies immediately adjacent to the satellite radio allocation will disrupt satellite service to millions of consumers. Sirius XM urged the Commission staff to consider only modest relaxation of the WCS out-of-band emissions specifications that would allow mobile broadband services on at least

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<sup>1</sup> See Letter from James S. Blitz, Vice President, Regulatory Counsel, Sirius XM Radio Inc., to Marlene H. Dortch, Secretary, FCC, IB Docket No. 95-91, WT Docket No. 07-293 (filed November 13, 2008) (“Sirius XM November 13<sup>th</sup> Filing”). See also, See Letter from Robert L. Pettit, Counsel to Sirius XM Radio, Inc., Wiley Rein LLP, to Marlene H. Dortch, Secretary, FCC, IB Docket No. 95-91, WT Docket No. 07-293 (filed November 6, 2008) (“Sirius XM November 6<sup>th</sup> Ex Parte”).

some portions of the WCS spectrum while allowing fixed broadband services on other parts of that band.

In this regard, Sirius XM again expressed its concern about any use of a so-called “stepped” emission mask as proposed by WCS interests. The stepped mask concept is fundamentally flawed because it would treat similar satellite downlink sub-bands differently without adequate justification and would effectively prevent use of the two outer satellite downlink bands for consumer-quality satellite radio service, turning them into guard bands for WCS mobile service.<sup>2</sup> The impact of allowing interference to the outermost satellite feeds would be particularly disruptive to the XM platform. As shown in the attached figure, the two XM satellite sub-bands are further divided into two segments called “ensembles.” In delivering service to subscribers, half of XM’s audio and data content is transmitted using the upper two satellite carriers (*i.e.*, the “B” ensemble channels 1B and 2B) and the other half is transmitted in the lower two satellite carriers (*i.e.*, the “A” ensemble channels 1A and 2A). Allowing a stepped out-of-band emissions mask to disrupt the B ensemble channels would create an imbalance in service availability between the two halves of the bandwidth in the presence of a WCS mobile operating under these rules. The programming and data carried on the B ensemble channels would therefore be lost to the subscriber and that lost data would not be available over the A ensemble channels.

Sirius XM also discussed the need for grandfathering provisions for its existing network of terrestrial repeaters and, in response to questions from the staff, agreed with the concept of adopting a system for frequency coordination of fixed infrastructure applicable to WCS licensees and Sirius XM. Sirius XM confirmed that it is willing to cooperate with the establishment of a system requiring good faith notification and coordination of fixed infrastructure, consistent with the coordination requirements in place for other services.

Sirius XM nonetheless opposes certain recommendations of the WCS Coalition with regard to the coordination and continued operation of grandfathered terrestrial repeaters. In a pleading dated July 22, 2008, the WCS Coalition consented to the notion of allowing all existing satellite radio terrestrial repeaters to continue operations provided that “those operations continue to be subject to the current absolute obligation to cure interference that might occur in the future to WCS operations.”<sup>3</sup> The WCS Coalition sought to codify this obligation in the following language in Part 25 of the Commission’s Rules:<sup>4</sup>

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<sup>2</sup> Sirius XM November 13<sup>th</sup> Filing at 3.

<sup>3</sup> See Letter from Paul J. Sinderbrand, Counsel to WCS Coalition, to Marlene H. Dortch, Secretary, Federal Communications Commission, IB Docket No. 95-91, WT Docket No. 07-293 (submitted July 22, 2008) at 3.

<sup>4</sup> *Id.* at 8.

A SDARS repeater station constructed prior to [date of adoption of Report and Order] that operates with one or more transmission antennas exceeding 2000 watts average equivalent isotropically radiated power (EIRP) per 5 MHz and 400 watts average EIRP per 1 MHz may continue to operate at the EIRP at which it was operating on such date, provided that: (a) such operation is on a noninterference basis with respect to all permanently authorized radiocommunication facilities ; and (b) the SDARS licensee provides each WCS licensee with a complete listing of all such repeater stations no later than [10 days following effective date of Report and Order] that includes the location (by coordinates accurate to one tenth of a second), the make and model number of each transmit antenna, any beam tilt employed in the installation of a transmit antenna, the azimuth and average equivalent isotropically radiated power of the main beam of each transmit antenna and the height above ground level of the main beam of each transmit antenna;

The WCS Coalition's proposal would subject Sirius XM's existing repeaters to a perpetual noninterference condition, effectively treating satellite radio as a secondary service nationwide, despite the Commission's recognition of satellite radio's need for terrestrial repeaters in the 2.3 GHz band. The WCS Coalition takes this position despite the fact that WCS licensees have never provided any substantive showing that satellite radio repeaters pose any interference threat to WCS operations nor have satellite radio repeaters ever been alleged to interfere with existing WCS operations. Given the lack of evidence in the record that terrestrial repeaters operating in excess of 2000 watts average EIRP pose any substantial risk of interference to WCS operations, imposing such a requirement would be arbitrary, capricious, and inconsistent with FCC policies and rules applicable to other services.<sup>5</sup>

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<sup>5</sup> In a similar adjacent band relationship, the FCC allows licensees on the Lower 700 MHz C, D and E blocks to operate base stations with as much as 50,000 watts EIRP without imposing an absolute obligation to cure interference that might occur in the future to operations in adjacent bands, which are allocated for advanced wireless services. *See* 47 C.F.R. § 27.50(c).

Sirius XM would have no objection to providing WCS licensees (or a third party coordinator) with the relevant technical parameters of all grandfathered repeater facilities so that WCS licensees can engineer future network deployment in a manner that avoids potential interference. In addition, Sirius XM would have no objection to providing prior notification of any proposed new repeater sites, including the relocation or modification of any grandfathered facility.<sup>6</sup>

Respectfully Submitted,

/s/ James S. Blitz

James S. Blitz

Vice President, Regulatory Counsel

Sirius XM Radio Inc.

1500 Eckington Place, NE

Washington, DC 20002

Attachment: XM Channel Ensembles

CC: Meeting Participants

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<sup>6</sup> Sirius XM previously submitted proposed rules that would allow any grandfathered repeater to be replaced with a repeater at a new location provided that: 1) the new site is within 3 kilometers of the old site; 2) the area within the 100 dBuV/m contour of the new facility is not greater than the grandfathered facility; and 3) the new 100 dBuV/m contour does not extend the grandfathered contour by more than 3 kilometers in any direction. This flexibility is needed to protect service to consumers when existing repeaters sites become unavailable to Sirius XM and to promote network efficiency. The impact to the WCS service should be negligible. *See* Letter from James S. Blitz, Vice President, Regulatory Counsel, Sirius XM Radio Inc., to Marlene H. Dortch, Secretary, FCC, IB Docket No. 95-91 (filed September 8, 2008) at Exhibit D.