

OCT 16 2006

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

Federal Communication Commission
Bureau / Office

In the matter of)	
)	
Sirius Satellite Radio Inc.)	File No. SAT-STA-20060623-00067
)	
Request for Modification of Special)	
Temporary Authority to Operate Terrestrial)	
Repeaters)	

To: Acting Chief, International Bureau

REPLY

The WCS Coalition, by its attorneys and pursuant to Section 25.154(d) of the Commission's Rules, hereby replies to the Opposition filed by Sirius Satellite Radio Inc. ("Sirius") with respect to petitions submitted by the WCS Coalition and two of its members urging the Commission to deny Sirius' request for a modification to the special temporary authority ("STA") that permits Sirius to operate terrestrial repeaters in conjunction with its satellite Digital Audio Radio Service ("SDARS") system. For all of the misplaced rhetoric of Sirius' response, it still has not satisfied the requirements for an STA set forth in Section 25.120 for an STA.

A. Sirius Defies Credulity In Suggesting That WCS Is A Secondary Service Relative To SDARS.

Sirius' Opposition illustrates that Sirius can not only cite to a work of fiction,¹ it also can create one. In a thinly-veiled effort to imply that licensees in the 2.3 GHz band Wireless Communications Service ("WCS") lack interests to be protected in this matter, Sirius goes to recount the history of WCS and SDARS. However, the story it portrays bears little relationship

¹ See Opposition of Sirius Satellite Radio Inc. to Petitions to Deny, File No. SAT-STA-20060623-00067 at 6 n.24 (filed Oct. 2, 2006) ["Sirius Opposition"].

to the facts.² Most strikingly, when Sirius claims that “WCS [is] secondary to satellite DARS” and that there is a “primacy of satellite DARS over WCS,”³ it distorts the Commission’s actions over the past decade with respect to these two services beyond any recognition.

Admittedly, when the Commission established rules to govern WCS, it adopted strict limits on WCS out-of-band emissions (“OOBE”) into the adjacent SDARS allocation.⁴ But that hardly makes WCS a secondary service relative to SDARS. To the contrary, in the very decision cited by Sirius for the proposition that WCS is secondary, the Commission made very clear that “our intention in determining out-of-band emission limits for WCS into the spectrum used by DARS has been to limit the potential for interference to a reasonable level – *not to provide a pure interference-free environment.*”⁵ Although protection from WCS to SDARS is not germane to whether the Commission should permit Sirius to deploy even more high-power terrestrial

² Not surprisingly, Sirius chooses to gloss over the fact that terrestrial DARS repeaters were initially envisioned by the Commission as low-power “gap-fillers” that would be deployed in “urban canyons and other areas where it may be difficult to receive DARS signals transmitted by satellite.” *See Establishment of Rules and Policies for the Digital Audio Radio Satellite Service in the 2310-2360 MHz Frequency Band*, Report and Order, Memorandum Opinion and Order and Further Notice of Proposed Rulemaking, 12 FCC Rcd 5754, 5810 (1997). As we now know, however, the SDARS licensees would prefer to deploy much high-power devices that are located to blanket large geographic areas with their signals, rather than target the urban canyons and other discrete locations where satellite signal reception is problematic.

³ *See* Sirius Opposition at 2, 3 n.11.

⁴ *See Amendment of the Commission’s Rules to Establish Part 27, the Wireless Communications Service*, 12 FCC Rcd 3977 (1997)[“WCS Reconsideration Order”].

⁵ *See WCS Reconsideration Order*, 12 FCC Rcd at 3991. Indeed, the Commission made clear that the OOBE restrictions were likely more restrictive than necessary because the flexibility afforded WCS licensees made it difficult to ascertain the nature of WCS service offerings at the time. *See id.* The Commission recognized that “[a] specific system configuration may have certain attributes that were not taken into account when developing the general emission limits but which reduce its potential to interfere with DARS.” *See id.* Thus, it concluded that “it is possible to provide a reasonable level of protection to DARS by taking into account a specific WCS system, although it may exceed the out-of-band emission limits adopted in the *Report and Order.*” *Id.* Indeed, Sirius has recently conceded that under certain circumstances, “the limit on out-of-band interference can be revisited and potentially relaxed.” “Interference to the SDARS Service from WCS Transmitters,” White Paper prepared by Sirius Satellite Radio Engineering *et al.*, at 18 (March 28, 2006) *filed as an attachment to* Letter from Carl R. Frank, Counsel to Sirius Satellite Radio Inc., to Marlene H. Dortch, Secretary, Federal Communications Commission, WT Docket No. 05-256 (filed March 29, 2006).

repeaters that threaten future WiMAX and other deployments in the WCS band, the Commission should promptly disabuse Sirius of any notion that SDARS is entitled to absolute protection against interference from WCS.

Sirius' contention that WCS is secondary to SDARS (and thus the Commission need not worry about the impact of SDARS terrestrial repeaters on WCS) is further belied by the Commission decisions granting Sirius its first STA. When the Commission initially authorized to operate its repeater network, it expressly stated that "[o]peration of all SDARS repeaters authorized pursuant to this STA is on a non-interference basis"⁶ and Sirius must "immediately reduce the power level or, if necessary, cease operation of any repeater that causes interference to a WCS" station.⁷ The Commission explained that its intention was "to prevent interference to WCS" – something that would hardly be a concern were WCS secondary to SDARS as Sirius contends.⁸

Moreover, Sirius' assertion that the Commission views WCS as a secondary stepchild to SDARS is impossible to square with the Commission's own internally-generated proposals for resolving the long-standing dispute over the rules that will ultimately govern SDARS terrestrial repeater operations.⁹ Suffice it to say that the Commission's proposals did not reflect any primacy of SDARS terrestrial repeaters. The Commission's proposals would have imposed strict limits on OOB from terrestrial SDARS repeaters into the WCS band,¹⁰ required advance notice

⁶ See *Sirius Satellite Radio Inc.*, Order and Authorization, 16 FCC Rcd 16773, 16779 (2001)[*"Sirius STA Order"*].

⁷ See *id.* at 16778.

⁸ See *Sirius Satellite Radio Inc.*, Order, 16 FCC Rcd 18481, 18482 (2001).

⁹ See "Request For Further Comment On Selected Issues Regarding The Authorization Of Satellite Digital Audio Radio Service Terrestrial Repeater Networks," 16 FCC Rcd 19435 (2001).

¹⁰ See *id.* at 3 ("Below 2320 MHz and above 2345 MHz, the power of any SDARS repeater emission shall be attenuated below the peak equivalent isotropically radiated power (P_{eip}) within the assigned frequency

by SDARS licensees to WCS operators prior to deployment of repeaters,¹¹ and mandated financial compensation from SDARS licensees to WCS licensees adversely impacted by certain terrestrial SDARS repeater installations.¹² While the Commission's proposal was criticized by both WCS and SDARS interests and is not a fruitful avenue to pursue,¹³ the important point is that none of these proposals would have been developed by the Commission if it did not perceive WCS licensees as entitled to protection from SDARS interference.

In short, the WCS Coalition does not, as Sirius so snidely suggests, suffer from "allocation amnesia" about satellite DARS spectrum primacy."¹⁴ To the contrary, Sirius appears to be suffering from delusions of regulatory grandeur totally unsupported by any rational review of the record.

B. Sirius Has Yet To Establish Entitlement To A Modification Of Its STA Under Section 25.120 Of The Commission's Rules.

In petitioning the Commission to deny Sirius' request for a modification of its existing STA to permit operation of additional repeaters levels in excess of 2,000 watts peak EIRP, the WCS Coalition established that Sirius' request fails to satisfy the requirements of Section 25.120 of the Commission's Rules that must be met before any special temporary authority can be granted. In particular, the WCS Coalition noted that Sirius' filing was surprisingly short of any

band(s) of operation between 2320 MHz and 2345 MHz, measured in watts, by a factor not less than $75 + 10\log(P_{\text{eirp}})$ dB, where P_{eirp} is measured in watts.").

¹¹ See *id.* at 4.

¹² See *id.* at 6.

¹³ See Comments of the WCS Coalition, IB Docket No. 95-91 (filed Dec. 14, 2001); Comments of Sirius Satellite Radio Inc., IB Docket No. 95-91 (filed Dec. 14, 2001); Comments of XM Radio Inc., IB Docket No. 95-91 (filed Dec. 14, 2001); Comments of the Wireless Communications Ass'n Int'l, Inc., in Response to Public Notice, IB Docket No. 95-91 (filed Dec. 14, 2001).

¹⁴ Sirius Opposition at 7.

technical evidence establishing a need for the sixteen additional high-power repeaters it is requesting.¹⁵

Sirius' Opposition does nothing to change that fact. Sirius mischaracterizes the WCS Coalition's point, claiming it is raising an issue the Commission rejected in its 2001 decision granting Sirius' initial STA application.¹⁶ That is not true. There, the Commission determined, over objections from the WCS community, that the "extraordinary circumstances" and "serious prejudice to the public interest" benchmarks of Section 25.120 were satisfied by Sirius' business desire to begin market its commercial service, notwithstanding the specific provision of Section 25.120 that "convenience to the applicant, such as marketing considerations or meeting scheduled customer in-service dates will not be deemed sufficient."¹⁷ Here, however, the WCS Coalition has raised a very different issue – whether the public interest will be served by allowing Sirius to construct additional repeaters operating above 2,000 Watts peak EIRP, particularly given Sirius' unabashed lobbying for the grandfathering of all of its repeaters when final rules are adopted.

¹⁵ See Petition of the WCS Coalition to Deny, File No. SAT-STA-20060623-00067, at 7-8 (filed Sept. 18, 2006)[“WCS Coalition Petition”]. The WCS Coalition was not alone in its position. NextWave Broadband, Inc. (“NextWave”) and BellSouth Mobile Data, Inc and BellSouth Wireless Cable, Inc. (“BellSouth”) similarly established that Sirius has failed to establish its entitlement to an STA under the requirements of Section 25. 120. See Petition of NextWave Broadband Inc. to Deny, File No. SAT-STA-20060623-00067 (filed Sept. 18, 2006)[“NextWave Petition”]; Petition of BellSouth Mobile Data and BellSouth Wireless Cable to Dismiss or Deny, File No. SAT-STA-20060623-00067 (filed Sept. 18, 2006)[“BellSouth Petition”].

¹⁶ See Sirius Opposition at 5.

¹⁷ See *Sirius STA Order*, 16 FCC Rcd at 16775-6. The Commission's rationale there was that it would be unfair to prejudice Sirius “because there are no final repeater rules.” *Id.* at 16775. It is telling that while Sirius has sought and enjoyed the benefit of regulatory relief owing to the delay in adopting permanent repeater rules, it has fought to prevent the WCS community from enjoying relief from the substantial service deadlines they find problematic because, in part, of the same delay in adopting permanent repeater rules. See *Opposition of Sirius Satellite Radio Inc., WT Docket 06-102* (filed June 9, 2006).

As the WCS Coalition noted in its petition, Sirius concedes that “[a]ll of the proposed sites are located within [MSAs] where Sirius is already licensed to utilize complementary terrestrial repeaters to overcome the effects of satellite signal blockage and multipath interference.”¹⁸ Thus, the WCS Coalition petition (as well as that filed by NextWave) asked why, given that Sirius already is authorized to utilize repeaters in these markets, Sirius cannot simply invoke its current authority to deploy additional terrestrial repeaters operating with a peak EIRP of 2,000 Watts or less to fill in those areas not covered by the existing repeater network.¹⁹

Although Sirius contends that “[e]ach proposed transmitter was engineered at power levels no more than necessary to plug perceived service availability shortfalls,”²⁰ that statement, unsupported by any declaration from an engineer, simply cannot be true. As WCS interests have pointed out throughout IB Docket No. 95-91, SDARS licensees can fill in gaps in satellite coverage by using terrestrial repeaters limited to 2,000 watts peak EIRP. While that may impose additional costs that the SDARS licensees would prefer to avoid, the record is clear that such lower-powered terrestrial repeaters threaten less interference to WCS adjacent channel operations.²¹ As such, Sirius has the burden here of establishing why it cannot reasonably fill the gaps in its coverage area through deployment of already-authorized terrestrial repeaters operating at or below 2,000 watts peak EIRP. It has failed to carry that burden, and thus the Commission cannot find that either “extraordinary circumstances” justifying even more high-power repeaters.

¹⁸ WCS Coalition Petition at 7-8, *citing* Sirius Satellite Radio Inc., Application for Space Station Special Temporary Authority, File No. SAT-STA-20060623-00067, Att. A, at 1 (filed June 23, 2006).

¹⁹ *See id.* at 8; NextWave Petition at 3.

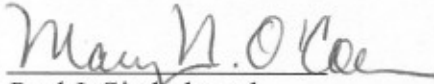
²⁰ Sirius Opposition at 4.

²¹ *See, e.g.,* BellSouth Petition at 6-8.

WHEREFORE, for the foregoing reasons, the Commission should deny Sirius' request for modification of its STA to add authority to construct and operate additional high-power repeaters.

Respectfully submitted,

THE WCS COALITION

By: 
Paul J. Sinderbrand
Mary N. O'Connor

WILKINSON BARKER KNAUER, LLP
2300 N Street, NW
Suite 700
Washington, DC 20037-1128
202.783.4141

Their Attorneys

October 16, 2006

CERTIFICATE OF SERVICE

I, Karla E. Huffstickler, hereby certify that the foregoing Reply was served this 16th day of October, 2006 by depositing a true copy thereof with the United States Postal Service, first class postage prepaid, addressed to the following:

Patrick L. Donnelly
Sirius Satellite Radio, Inc.
1221 Avenue of the Americas
36th Floor
New York, NY 10020

Carl Frank
Wiley Rein & Fielding, LLP
1776 K Street, NW
Washington, DC 20006

* Fred Campbell
Federal Communications Commission
Office of Chairman Martin
445 12th Street, SW, Room 8-B201
Washington, DC 20554

* Bruce Gottlieb
Federal Communications Commission
Office of Commissioner Copps
445 12th Street, SW, Room 8-B115
Washington, DC 20554

* Barry Ohlson
Federal Communications Commission
Office of Commissioner Adelstein
445 12th Street, SW, Room 8-A302
Washington, DC 20554

* Aaron Goldberger
Federal Communications Commission
Office of Commissioner Tate
445 12th Street, SW, Room 8-A204
Washington, DC 20554

* Angela Giancarlo
Federal Communications Commission
Office of Commissioner McDowell
445 12th Street, SW, Room 8-C302
Washington, DC 20554

* Julius Knapp
Federal Communications Commission
Office of Engineering and Technology
445 12th Street, SW, Room 7-C250
Washington, DC 20554

* Bruno Pattan
Federal Communications Commission
Office of Engineering and Technology
445 12th Street, SW, Room 7-A460
Washington, DC 20554

* Ron Chase
Federal Communications Commission
Office of Engineering and Technology
445 12th Street, SW, Room A-A364
Washington, DC 20554

* Hung Le
Federal Communications Commission
Office of Engineering and Technology
445 12th Street, SW, Room 7-A460
Washington, DC 20554

* Harry Wong
Federal Communications Commission
Office of Engineering and Technology
445 12th Street, SW, Room 7-A345
Washington, DC 20554

* Robert Nelson
Federal Communications Commission
International Bureau
445 12th Street, SW, Room 6-A665
Washington, DC 20554

* Cassandra C. Thomas
Federal Communications Commission
International Bureau
445 12th Street, SW, Room 6-A666
Washington, DC 20554

* Ira Keltz
Federal Communications Commission
Office of Engineering and Technology
445 12th Street, SW, Room 7-A224
Washington, DC 20554

* Rod Porter
Federal Communications Commission
International Bureau
445 12th Street, SW, Room 6-C752
Washington, DC 20554

* Cathleen Massey
Federal Communications Commission
Wireless Telecommunications Bureau
445 12th Street, SW, Room 3-C250
Washington, DC 20554

* Roger Noel
Federal Communications Commission
Wireless Telecommunications Bureau
445 12th Street, SW, Portals I – Rm. 6327
Washington, DC 20554

* Zenji Nakazawa
Federal Communications Commission
Wireless Telecommunications Bureau
445 12th Street, SW, Room 4-C401
Washington, DC 20554

* Rockie Patterson
Federal Communications Commission
International Bureau
445 12th Street, SW, Room 6-B524
Washington, DC 20554

* Salomon Satche
Federal Communications Commission
Office of Engineering and Technology
445 12th Street, SW, Room 7-A124
Washington, DC 20554

* Richard Engelman
Federal Communications Commission
International Bureau
445 12th Street, SW, Room 6-A668
Washington, DC 20554

* Breck Blalock
Federal Communications Commission
International Bureau
445 12th Street, SW, Room 6-C749
Washington, DC 20554

* David Furth
Federal Communications Commission
Wireless Telecommunications Bureau
445 12th Street, SW, Room 3-C162
Washington, DC 20554

* Tom Derenger
Federal Communications Commission
Wireless Telecommunications Bureau
445 12th Street, SW, Portals I – Rm. 6339
Washington, DC 20554

* Guy Benson
Federal Communications Commission
Wireless Telecommunications Bureau
445 12th Street, SW, Room 3-A334
Washington, DC 20554

Bennett Ross
BellSouth D.C., Inc.
Legal Department
1133 21st Street, NW, Suite 900
Washington, DC 20036

George Alex
NextWave Broadband Inc.
75 Holly Hill Road, Suite 200
Greenwich, CT 06830

* *Via Hand Delivery*

Stephen Coran
Rini Coran P.C.
1615 L Street, NW, Suite 1325
Washington, DC 20036



Karla E. Huffstickler