

March 12, 2008

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

Re: *Amendment of Parts 1, 21, 73, 74 and 101 of the Commission's Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands; Amendment of Parts 21 and 74 of the Commission's Rules With Regard to Licensing in the Multipoint Distribution Service and in the Instructional Fixed Television Service for the Gulf of Mexico – WT Docket Nos. 03-66 and 02-68 -- WRITTEN EX PARTE COMMUNICATION*

Dear Ms. Dortch:

I am writing on behalf of the Wireless Communications Association International, Inc. (“WCA”) to briefly respond to an *ex parte* notification filed earlier this week by the American Petroleum Institute (“API”)¹ urging the Commission to reverse its 2006 decision to refrain from licensing Broadband Radio Service (“BRS”) in the Gulf of Mexico² and to establish BRS service areas in the Gulf, the Atlantic Ocean and the Pacific Ocean. While WCA does not necessarily oppose the creation of a Gulf service area if demand can be demonstrated, operations in that area and on land adjacent to the Gulf cannot be regulated under the general 2.5 GHz band rules, which were not designed to provide protection under conditions where ducting is present. Instead, any Gulf service area should be regulated in the manner specifically designed to avoid undue harm to the tens of millions of Americans that reside in areas neighboring the Gulf.

At the outset, API’s request for the creation of BRS service areas in the Atlantic Ocean and Pacific Ocean goes far beyond the scope of this proceeding. At no time in this proceeding,

¹ See Letter from Jack Richards, Counsel to American Petroleum Institute, to Marlene H. Dortch, Secretary, Federal Communications Commission, WT Docket No. 02-68 *et al.* (filed March 10, 2008).

² See *Amendment of Parts 1, 21, 73, 74 and 101 of the Commission's Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands*, Order on Reconsideration and Fifth Memorandum Opinion and Order and Third Memorandum Opinion and Order and Second Report and Order, 21 FCC Rcd 5606, 5762 (2006) [“2006 BRS/EBS Second R&O and Order on Reconsideration”].

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or in any other proceeding, has the Commission proposed or even suggested the possibility of licensing BRS spectrum in the Atlantic and Pacific Oceans. Nor, for that matter, did API until it petitioned for reconsideration of the *Second Report and Order*. In effect, API is saying the Commission erred when it failed to adopt in the *Second Report and Order* a proposal that neither the Commission, API nor anyone else had even put forth. WCA has demonstrated that as a matter of law the Administrative Procedure Act precludes the Commission from establishing Atlantic and Pacific service areas under these circumstances. API's sole rejoinder has been to effectively concede the point, suggesting that "[i]f the Commission has Administrative Procedure Act concerns as to whether the creation of Atlantic and Pacific service areas is sufficiently incorporated into this proceeding, API would welcome the Commission's request of comments on the issue."

Moreover, API has yet to respond to the overwhelming evidence in the record that authorizing Gulf operations subject merely to the Commission's current 2.5 MHz technical rules would cause a clear and present danger to land-based services due to the complicating presence of ducting. Ducting is not some figment of WCA's imagination -- the Commission itself has found that in the Gulf "[d]ucting of signals, including MDS/ITFS microwave signals, enables these signals to travel relatively unattenuated for distances far greater than would occur without the presence of the duct."³

Nor are the problems ducting will cause for 2.5 GHz band operations figments of WCA's imagination. The Commission has concluded that there is a "*certainty* that ducting will occur between Gulf and land-based stations," that this ducting will cause interference over much greater distances than caused by land-based BRS and EBS systems, and that water-based BRS systems should be required therefore to comply with interference protection requirements that are more stringent than those imposed on land-based facilities.⁴ In addition, the Commission has concluded that "it will be virtually impossible for current licensees to achieve [full coverage of the population along the Gulf coast] if they must afford full interference protection to Gulf of Mexico systems."⁵ Specifically, the Commission has found that "[g]iven the much greater population density of the land-based relative to Gulf systems, the steps taken to modify one land-based main or booster station so that it can fully protect a very few Gulf stations might mean the loss of service to hundreds or thousands of households in the urban or suburban area the main or booster station was designed to serve" and expressed the view that "this tradeoff would be unacceptable."⁶ Thus, WCA has proposed rules for operations in and around the Gulf that were specifically designed to avoid the very problems the Commission has identified.

³ See *Amendment of Parts 21 and 74 of the Commission's Rules With Regard to Licensing in the Multipoint Distribution Service and in the Instructional Television Fixed Service for the Gulf of Mexico*, Notice of Proposed Rulemaking, 17 FCC Rcd 8446, 8464 (2002).

⁴ *Id.* at 8465-66 (emphasis in original).

⁵ *Id.* at 8467.

⁶ *Id.*

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API's assertion that the Commission's current BRS/EBS rules can be applied to address operations in and around the Gulf of Mexico ignores a host of practical problems. The rules were not designed to govern operations in the Gulf, or to restrict operations on land to protect uses in the Gulf. Among the many questions API has yet to answer relating to its assertion that the current BRS/EBS rules can apply to a Gulf license:

- How will water-based systems be designed to comply with the 47 dB μ V/m limit on signal strength at the boundary of the geographic service areas of incumbent BRS/EBS licensees and BTA authorization holders, given that ducting can relay water-based signals far beyond the normal line-of-sight limitation in the 2.5 GHz band?
- How does API anticipate that the incumbent licensees of land-based systems bordering the Gulf will avoid exceeding the 47 dB μ V/m limit at the boundary of any Gulf service area (even one twelve nautical miles beyond the coastline), knowing that their signals can be ducted well beyond that boundary and far into the Gulf of Mexico? Are land-based licensees to hobble their designs to account for ducting into the Gulf, when doing so precludes the offering of a reliable, economic service to consumers living near the Gulf?
- Under Section 27.1221(b) of the Commission's Rules, the licensee of a base station constructed above its height benchmark must reduce its signal strength as measured at a cochannel base station in a neighboring GSA that is within its height benchmark to -107 dBm. The calculation of a given base station's height benchmark is based on a predication of the base station's line-of-sight using a standard formula. As noted, the Commission itself has acknowledged that ducting can result in the reception of signals far beyond the line-of-sight prediction under that formula, and thus the safe harbor formula will not provide the requisite protection from interference caused by water-based stations to land-based operations. How does API propose to avoid interference to land-based BRS and EBS systems when ducting can lead to situations in which Gulf-based systems exceed -107 dBm at a land-based base station, even where the interfering station is within its height benchmark?

API's latest filing, ignores these questions, as well as the prior Commission declarations regarding ducting and the science of ducting that underlays them. Instead, it contents itself with the following line of reasoning – the Commission has established Gulf service areas for AWS-1, WCS, 1.4 GHz and 700 MHz band, and therefore it should do so here. This logic is flawed, however, because the Commission did not find ducting to be benign in any of those proceedings. To the contrary, the problems that ducting will cause in and around the Gulf simply were not discussed. WCA can only speculate, but perhaps the Commission's lack of discussion of the issue can be traced to the fact that in each of these cases the Commission would be auctioning the spectrum in the Gulf at the same time as it would be auctioning the spectrum on land

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surrounding the Gulf, and thus it was considered more reasonable to place the burden of resolving ducting problems jointly on the eventual auction winners.

That, however, is hardly the case here. Although never mentioned by API, the more applicable precedent is the Commission's handling the auctioning of broadband Personal Communications Service ("PCS") spectrum in the Gulf.⁷ There, an auction has been opposed by incumbent PCS licensees because of ongoing concerns regarding ducting interference to those who have already acquired spectrum to serve the land-mass surrounding the Gulf, and the Commission has yet to auction broadband PCS spectrum in the Gulf,. Here, however, BRS licensees have no objection to the auctioning of a Gulf service area if there is a demonstrable demand for service that cannot otherwise be met, so long as the Commission adopts appropriate rules that assure water-based operations do not pose an undue threat to land-based operations.

Finally, API continues to rely on rhetoric rather than hard data to support its claim that the BRS spectrum is needed to meet communications needs in the Gulf, notwithstanding the Commission's finding less than two years ago that "[t]he record does not demonstrate a demand for BRS or EBS operations in the Gulf of Mexico at this time,"⁸ API's failure is hardly surprising – there is ample unused spectrum in the Gulf, including the newly auctioned bands at 700 MHz, 1.4 GHz, and AWS-1 that can be used in the Gulf to provide precisely the sorts of services API envisions for the 2.5 GHz band. Yet, API offers no explanation of why the Commission should jeopardize 2.5 GHz service to residents in areas around the Gulf when there is this plethora of other spectrum available to API's members.

Pursuant to Section 1.1206(b)(1), this notice is being filed electronically with the Commission via the Electronic Comment Filing System for inclusion in the public record of the above-referenced proceedings. Should you have any questions regarding this presentation, please contact the undersigned.

Respectfully submitted,

/s/ Paul J. Sinderbrand

Paul J. Sinderbrand

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Association International, Inc.

⁷ See *Cellular Service and Other Commercial Mobile Radio Services in the Gulf of Mexico*, Order on Reconsideration, 18 FCC Rcd 13169, 13183 (2003).

⁸ 2006 BRS/EBS Second R&O and Order on Reconsideration, 21 FCC Rcd at 5762.

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