

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

In the Matter of)	
)	
Digital Audio Broadcasting Systems)	MM Docket No. 99-325
And Their Impact On the Terrestrial Radio)	
Broadcast Service)	

**REPLY COMMENTS OF
THE NATIONAL ASSOCIATION OF BROADCASTERS**

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1771 N Street, NW
Washington, D.C. 20036

Henry L. Baumann
Jack N. Goodman
Valerie Schulte

Lynn Claudy
John Marino
David H. Layer
NAB Science and Technology

July 18, 2002

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The National Association of Broadcasters¹ (NAB) files reply comments in the above referenced docket on the issue of the National Radio Systems Committee DAB Subcommittee’s “Evaluation of the iBiquity Digital Corporation IBOC System, Part 2–AM IBOC” (NRSC Report).² The Commission’s 1999 *Notice of Proposed Rulemaking* (NPRM) in this proceeding on the introduction of terrestrial DAB opened and concluded by noting the Commission’s intention to develop a complete record on these issues “in order to be in a position to take informed and expeditious action at the proper time.”³ The Commission has received comments and reply comments on the NRSC’s evaluation

¹ NAB is a nonprofit incorporated association of radio and television stations and broadcast networks. NAB serves and represents the American broadcasting industry.

² *Public Notice*, MM Docket No. 99-325, rel. April 19, 2002.

³ *Notice of Proposed Rulemaking*, MM Docket No. 99-325, rel. Nov. 1, 1999, at ¶ 58; *see also* ¶ 2.

of iBiquity Digital's FM IBOC system, and now completes the comment and reply comment period on the NRSC's evaluation of iBiquity Digital's AM IBOC system.

NAB suggests that now is the proper time for the Commission to take "informed and expeditious" action to endorse IBOC and iBiquity Digital's AM and FM IBOC systems and to authorize interim AM and FM IBOC transmissions as recommended by the NRSC in this first phase of IBOC authorization. The comments filed on the NRSC's evaluation of the AM system support this action, as we will discuss below. The Commission thus can finally enable America's terrestrial broadcasters to begin digital transmissions while they continue to support the American listening public's analog service. Thus American radio broadcasters' rich service to the public can be extended in the digital era and they can be empowered to compete in the digital age.

NAB believes that an interim authorization of IBOC DAB is necessary in order for the Commission and broadcasters to fully understand the benefits and tradeoffs of IBOC technology for the AM and FM bands prior to IBOC standardization and the establishment of final service rules. Immediate interim authorization will allow broadcasters, receiver manufacturers, ancillary service providers and others to further study the performance of IBOC DAB in a real-world environment as IBOC products are readied for the marketplace. Furthermore, this interim authorization period will ensure that final FCC rules are accurately crafted reflecting any performance "tweaking" of the IBOC system that may be required and easily facilitated during this period.

In a second phase, the Commission can and should adopt iBiquity Digital's AM and FM IBOC technology as the single technical standard for the AM and for the FM services on the basis of expedited standardization by the NRSC and, also in the second

phase, develop appropriate service rules for both digital services. Included in this final authorization would be evaluation and potential endorsement of AM IBOC nighttime operations, which must continue to be studied in the interim. Final rules will also include comprehensive AM IBOC daytime service rules which, as will be discussed below, require further careful evaluation which, nonetheless, need not delay expeditious action to authorize immediate AM and FM IBOC interim operation.

The weight of comments here filed by the broadcasting industry call for a rapid introduction of terrestrial DAB using iBiquity's IBOC technology. AM broadcasters, including Susquehanna Radio Co., Journal Broadcast Corporation, Greater Media, Inc., Cox Radio, Inc., National Public Radio, Infinity Broadcasting Corporation and Clear Channel Communications, Inc. all support rapid and immediate interim authorization of iBiquity Digital's AM IBOC system.⁴ These broadcasters acknowledge the necessity of the NRSC limiting its recommendation of AM IBOC to daytime operation for the present, but believe, as Greater Media put it, "the NRSC has struck the correct balance between assuring the initiation of digital transmission on the AM band and the preservation of existing analog service."⁵ As Greater Media further explained, "initiation of IBOC service during daytime hours presages the dramatic transformation of AM radio from its current status as a largely poor-quality/voice-only medium to a digital service with audio quality on a par with today's analog FM. Perhaps most notably, most types of

⁴ See Comments of Susquehanna Radio Co., filed June 17, 2002; Comments of Journal Broadcast Corporation, filed June 18, 2002; Comments of Greater Media, Inc., filed June 18, 2002; Comments of Cox Radio, Inc., filed June 18, 2002; Comments of National Public Radio, Inc., filed June 18, 2002; Comments of Infinity Broadcasting Corporation, filed June 18, 2002; Comments of Clear Channel Communications, Inc., filed June 18, 2002. See also Comments of WGUL-FM, Inc., filed June 13, 2002.

⁵ Comments of Greater Media, Inc. at 2.

man-made and natural interference, the scourge of today's AM radio service, are either eliminated entirely or made vastly more tolerable in the digital mode." *Id.* As Susquehanna Radio Co. put it, "IBOC can bring back high quality music to the AM band."⁶

Susquehanna also pointed out that "the iBiquity IBOC system meets all of the ten criteria" stated in the original NPRM, requires no new allocation of spectrum and "each AM broadcaster can enter the digital domain on its own schedule by simply adding the IBOC digital signal to its existing authorized facility." *Id.* Journal Broadcast Corporation says "the benefits of AM IBOC are substantial" and "has the potential to technically transform AM radio broadcasting."⁷ While Journal believes the service needs to be fulltime, it "strongly encourages" the FCC to rapidly endorse AM IBOC for daytime service while concurrent developments occur on the nighttime operation front. *Id.* It stresses that immediate endorsement will encourage receiver manufacturers to include AM IBOC in their first generation receivers, which is vital for AM stations. *Id.*

NAB thus notes the broad support of broadcasters seen in initial comments for the NRSC's recommendation of AM IBOC daytime operation, for early interim authorization of both AM and FM IBOC service and for the importance of FCC action this Fall to enable a winter roll-out of IBOC equipment and inclusion of both services in early IBOC receivers.

To the variety of individual and other commenters who question AM IBOC service as not as problem-free as new band service, limited by skywave interference

⁶ Comments of Susquehanna Radio Co. at 3.

⁷ Comments of Journal Broadcast Corporation at 2.

concerns, incompatible with analog AM stereo operation, etc.,⁸ NAB responds that AM IBOC can be transformative of AM broadcasting, can allow AM broadcasting to compete in the digital era and do it soon and can allow broadcasters and the public to transition to digital radio on their own timetable. NAB believes that now is the time for AM to reach that digital future, or likely never do so.

NAB strongly supports the NRSC's conclusions and recommendations for AM IBOC service and, at the same time, recognizes that there have been concerns noted about potential interference. Clear Channel Communications, Inc. in its initial comments, at 1-4, while urging rapid interim authorization, suggested an interim across-the-board power reduction in the "primary" AM IBOC carriers to avoid potential interference, particularly to analog listening at the edge of coverage for short-spaced first adjacent channel stations. NAB notes that such situations were addressed in the NRSC Report, which said "[g]enerally, interference attributable to IBOC on first adjacent channels should only be noticeable in cases where listeners are located outside the protected interference-free contour and should not cause significant AM listening problems during daytime hours."⁹ However, should the Commission deem it appropriate to adopt a conservative approach in authorizing transmission power levels for the early interim period while a more comprehensive plan is developed, the Commission could use its own resources to provide guidance for reduction in power in such situations. NAB further emphasizes that any

⁸ See e.g., Comments of Bob Carter - WGAI-AM 560, filed June 18, 2002; Comments of C. Crane Company Inc., filed June 13, 2002; Comments of Frederick R. Vobbe, filed May 6, 2002; Comments of REC Networks, filed April 29, 2002; Comments of WMTA AM 1380, Inc., filed April 22, 2002, and others.

⁹ *Evaluation of the iBiquity Digital Corporation (iBiquity) IBOC System, Part 2 – AM IBOC* (NRSC Report) at 8.

interim reduction in power level of a portion of the IBOC signal to accommodate these concerns must be temporary in nature. During the interim period where early rollout of IBOC service is authorized, a careful and comprehensive plan can be developed for final AM IBOC service rules that should allow the majority of AM stations to operate IBOC at full power as tested by the NRSC, and provide an adjustment for stations that might be likely to experience significant first adjacent channel interference due to their specific situations.

Susquehanna Radio Co., in acknowledging the potential for additional interference to the analog service of some adjacent channel stations on the fringe of their coverage, states that “this potential interference is minimal when compared to the quality and durability gains that will occur in every station’s main listening and marketing area” and concludes that the tradeoff offered by IBOC is in the best interests of AM broadcasters and the listening public.¹⁰ NAB agrees.

NAB has participated in this proceeding since its inception in 1999 and has followed, encouraged and challenged the development of IBOC throughout most of the 1990s to the present day. We have sponsored the work of the NRSC to rigorously test and evaluate IBOC. Our membership includes AM and FM broadcasters of all sizes, in all-sized markets. It is our considered and careful opinion that the time is indeed ripe for IBOC and for AM and FM broadcasters to enter the digital age utilizing iBiquity Digital’s IBOC technology. We believe it is important that the FCC move ahead now with early, simultaneous FM and AM IBOC service authorization. We believe that the interim phase during which early IBOC operations can be initiated will enable final

¹⁰ Comments of Susquehanna Radio Co. at 3.

service rules for both services to be developed and, as well, will allow AM IBOC nighttime service to be studied and AM IBOC power levels to be further studied and optimized. NAB thus respectfully requests that the Commission proceed to expeditiously authorize both AM and FM IBOC as discussed herein and in our earlier comments.

Respectfully submitted,

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