

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

In the Matter of	)	
Digital Audio Broadcasting Systems AND	)	MM Docket No. 99-325
Their Impact on Terrestrial Radio	)	
Broadcast Services	)	
	)	
	)	

**REPLY TO OPPOSITIONS TO PETITION FOR RECONSIDERATION OF  
NEW AMERICA FOUNDATION, PROMETHEUS RADIO PROJECT, BENTON  
FOUNDATION, COMMON CAUSE, CENTER FOR DIGITAL DEMOCRACY,  
CENTER FOR GOVERNMENTAL STUDIES,  
AND FREE PRESS**

The New America Foundation, Prometheus Radio Project, Benton Foundation, Common Cause, Center for Digital Democracy, Center for Governmental Studies, and Free Press, (“NAF et al.”), respectfully submit this reply to oppositions filed on February 11, 2008 by the National Association of Broadcasters (NAB), iBiquity Digital Corporation (iBiquity), and National Public Radio (NPR).

**ARGUMENT**

The oppositions claim the Commission has already considered the petition’s argument, and the extended IBOC hybrid system does not provide broadcasters with additional spectrum beyond their license. NAF et, al. have already anticipated and rejected these arguments in our *petition*. In reply, the following is shown:

**I. THE PETITION ASKS FOR RECONSIDERATION ON MATTERS THAT HAVE *NOT* BEEN DELIBERATED BY THE COMMISSION**

NAB’s, iBiquity’s, and NPR’s argument that the *Petition* should be denied on grounds that it presents no new evidence and the petition seeks reconsideration of matters

the Commission has already deliberated upon, is unsubstantiated.<sup>1</sup> The Commission's 2d R&O authorizes the FM extended hybrid mode, effectively assigning additional spectrum to incumbent licensees without serious consideration of a competitive auction, an annual usage fee, or even additional public interest obligations.<sup>2</sup> The Commission notes that according to the NAB, extended hybrid mode "adds up to 50 kbps of data carrying capacity to an FM IBOC signal," and "increases the bandwidth occupancy of the digital carriers."<sup>3</sup> However, as clearly indicated in the *Petition*, the 2d R&O has not addressed why this additional spectrum could not be made available to more voices, nor does it consider whether the spectrum should be auctioned under the FCC's authority under Section 309(j) of the Communications Act, even though the NAF et al. have repeatedly presented such arguments.<sup>4</sup>

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<sup>1</sup> See *Opposition of NAB* at 4 – 5. See also *Opposition of NPR* at 2 and *Opposition of iBiquity* at 1.

<sup>2</sup> *Digital Audio Broadcasting Systems And Their Impact On The Terrestrial Radio Broadcast Service*, Second Report and Order, 2007 FCC LEXIS 4087 ("2d R&O"), \*4 ¶ 3. The FCC had not previously authorized operation in extended hybrid mode. See, e.g., *Digital Audio Broadcasting Systems And Their Impact on the Terrestrial Radio Broadcast Service*, Further Notice of Proposed Rulemaking and Notice of Inquiry, 19 FCC Rcd 7505 (2004) ("2004 FNPRM"), at 7507 ¶ 3 (noting "neither the extended hybrid FM systems nor the all-digital system have been tested by the NRSC."); *2002 Order*, 17 FCC Rcd at 19994 ¶ 18.

<sup>3</sup> *Id.* at \*23 ¶ 18. See also *id.* at \*99 ¶ 80 ("using the extended hybrid mode increases the bandwidth occupancy"); *2004 FNPRM*, 19 FCC Rcd at 7512-13 ¶ 18 (finding that in FM system's "extended hybrid modes," "digital sidebands are extended closer to the analog signal.").

<sup>4</sup> See *PIC Comments* at 9-10; Letter from Angela Campbell, Institute for Public Representation, to Marlene Dortch, Secretary, FCC, in MM Docket No. 99-325, at 1 (July 26, 2006) ("*IPR Letter*").

## II. THE EXTENDED HYBRID IBOC SYSTEM PROVIDES BROADCASTERS WITH ADDITIONAL SPECTRUM BEYOND THEIR LICENSE

NAB, iBiquity and NAB assert that “petitioners request for reconsideration is based on the faulty premise that additional spectrum is being used for IBOC.”<sup>5</sup> NAB cites new definitions adopted in the Second R&O.<sup>6</sup> As they note, Section 73.402(b) defines “In Band On Channel DAB System” as “[a] technical system in which a station’s digital signal is broadcast in the same spectrum and on the same channel as its analog signal” and § 73.402(c) defines “Hybrid DAB System” as “[a] system which transmits both the digital and analog signals within the spectral emission mask of a single AM or FM channel.” Similarly NPR notes the system allows “broadcasters to transmit digitally *on their existing channel assignments.*”<sup>7</sup>

However, in prior statements in this proceeding the Commission itself has acknowledged that the IBOC system requires the use of additional spectrum. The 1999 NPRM stated that “[c]urrent IBOC system designs are premised on *doubling the bandwidth licensed to AM and FM stations to 20 kHz and 400 kHz.*”<sup>8</sup> In the 2d R&O the Commission fails to consistently address the issue of authorizing broadcasters to utilize spectrum beyond their existing channels. For example, in the 2d R&O the Commission claims that “IBOC technology makes use of the existing AM and FM bands (In-Band) by adding digital carriers to a radio station’s analog signal, allowing broadcasters to transmit digitally *on their existing channel assignments* (On-Channel) while simultaneously

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<sup>5</sup> *Opposition of NAB* at 5.

<sup>6</sup> *Opposition of NAB* at 7.

<sup>7</sup> *Opposition of NPR* at 6.

<sup>8</sup> *Digital Audio Broadcasting Systems And Their Impact on the Terrestrial Radio Broadcast Service*, Notice of Proposed Rulemaking, 15 FCC Rcd 1722, at 1737 ¶ 38 (1999) (“1999 NPRM”) (emphasis added).

maintaining their analog service.”<sup>9</sup> But in the section authorizing hybrid mode, the 2d R&O quotes the NAB’s assertion that “the use of the FM extended hybrid mode increases the bandwidth occupancy of the digital carriers.”<sup>10</sup>

Oppositions’ arguments do not obscure that the IBOC system increases the bandwidth occupancy of broadcasters. At best the incumbents’ arguments highlight the glaring need for the FCC to perform a “reasoned analysis” and provide a clear rationale for the decision, something which was sought in the *Petition*.

### **III. THE EMISSION MASK DOES NOT ENTITLE BROADCASTERS TO PERMANENT OCCUPANCY IN THE GUARD BANDS**

NAB contends that “a licensee’s analog signal, permitted as it is to emit energy in the sidebands, already is entitled to *permanently* occupy that spectrum, as defined in § 73.317.”<sup>11</sup> iBiquity further notes that “although the digital carriers are adjacent to the 200 kHz analog signal, which occupies the region 1 to 100 kHz from the center carrier, they occupy a region on either side of the analog signal that has been *set aside* for the existing analog broadcast to ensure the technical integrity of the broadcast signal.”<sup>12</sup> However, both arguments ignore the objective of §73.1317. The purpose of §73.317 was to establish requirements to prevent harmful interference to other authorized stations.<sup>13</sup> However, there is nothing in the wording of the section that explicitly allows broadcasters to transmit additional signals unrelated to the analog broadcast in the bandwidth from 120

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<sup>9</sup> 2d R&O, 2007 FCC LEXIS 4087, at \*5-6 ¶ 4 (emphasis added).

<sup>10</sup> 2d R&O, 2007 FCC LEXIS 4087 at \*23 ¶ 18. See also *id.* at \*99 ¶ 80 (“using the extended hybrid mode increases the bandwidth occupancy”).

<sup>11</sup> *Opposition of NAB* at 6 (emphasis added).

<sup>12</sup> *Opposition of iBiquity* at 3 (emphasis added)

<sup>13</sup> See 47 C.F.R §73.317(a). “In either case, should harmful interference to other authorized stations occur, the licensee shall correct the problem promptly or cease operation.”

kHz and beyond. Indeed, as NAB contends, broadcasters may “emit” and place energy out “to the edge of the mask”<sup>14</sup> as permitted by §73.317. But the section does not provide authorization for licensees to transmit additional services in spectrum allocated for the emission mask. The attenuation requirements of the emission as provided in §73.317(b), (c), (d), and (e) clearly establish the transmission requirements as a means to prevent interference resulting from emissions. Guard bands have certainly proven beneficial to licensees during an analog era, but like the analogous situation in the terrestrial TV bands, the allocation of unassigned guard bands to mitigate potential interference never conferred rights equivalent to an exclusive license.

FM broadcasters are licensed to use channels that consist of a band of frequencies “200 kHz wide.”<sup>15</sup> The allowance of emissions outside the 200 kHz range was necessary given the imperfection of previous broadcasting equipment. Although the inability of antiquated equipment to remain within the 200 kHz license allowed broadcasters to occupy the “guard band” spectrum, it does not follow that §73.317 grants FM broadcasters the right to ever deliberately use, permanently occupy, or have any primary status in that spectrum, particularly in the advent of more precise equipment. Furthermore, the emissions were directly associated with the analog broadcast, not separate multicasting, data and subscription services arising from utilization of the extended hybrid IBOC system. Although the IBOC system operates within the limits of the “emission mask” as provided in §73.317, it allows broadcasters to transmit additional

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<sup>14</sup> *Opposition of NAB* at 7.

<sup>15</sup> *See 2004 FNPRM*, 19 FCC Rcd at 7524. *See also* 47 C.F.R. § 73.310 (defining “FM broadcast channel” as “[a] band of frequencies 200 kHz wide and designated by its center frequency.”).

services in spectrum where they were previously allowed to simply “emit” incidental energy as a byproduct of their actual usable signal.

**IV. THE COMMISSION SHOULD NOT CONFER THE GUARD BAND SPECTRUM TO MUTUALLY EXCLUSIVE COMMERCIAL USES WITHOUT CONSIDERING THE APPLICATION OF SECTION 309(j)**

iBiquity argues the *Petition’s* reliance on *Fresno Mobile Radio* is “deficient” given that the “D.C. Circuit never implied anything in the Communications Act mandated a classification as an initial license” and deferred to the Commission’s authority in deciding the classification.<sup>16</sup> In a sort of Orwellian tautology, iBiquity contends the Commission’s authorization of HD Radio broadcasting does not constitute initial licenses because the “Commission has not issued new licenses for HD Radio broadcasts.”<sup>17</sup>

Section 309(j) of the Communications Act, as amended, requires with certain exceptions, that if “mutually exclusive applications are accepted for any initial license or construction permit, then, except as provided in paragraph (2), the Commission shall grant the license or permit to a qualified applicant through a system of competitive bidding that meets the requirements of this subsection.” The spectrum made available to commercial radio broadcasters in this proceeding fits these criteria.

As provided in *Fresno*, the Commission has defined “initial licenses” broadly to include all “first time licenses for systems and not renewals or modifications of existing licenses.”<sup>18</sup> The 2d R&O’s general authorization permitting FM radio broadcasters to

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<sup>16</sup> *Opposition of iBiquity* at 5

<sup>17</sup> *Id.* at 3.

<sup>18</sup> *Fresno Mobile Radio, Inc. v. FCC*, 165 F.3d 965, 971 (D.C. Cir. 1999) (upholding the Commission’s definition as reasonable in light of the ambiguous statutory text) (“In sum, because [the new license] is substantially different from [the applicant’s old license], the agency did not act unreasonably in treating [the new licenses] as ‘initial licenses’ within the meaning of § 309(j)(1).”); *see also Benkelman Telephone Co. v. FCC*, 220 F.3d 601, 605 (D.C. Cir. 2000).

transmit digital signals in the sidebands confers *initial licenses*, as broadcasters were not previously licensed to broadcast on the sidebands. The authorization of the IBOC system is not a modification because broadcasters were never licensed to broadcast in these sidebands.<sup>19</sup> In addition, as the D.C. Circuit held “nothing in the text of [§ 309(j)] forecloses [the FCC] from considering a license ‘initial’ if it is the first awarded for a particular frequency under a new licensing scheme, that is, one involving a different set of rights and obligations for the licensee.”<sup>20</sup> The 2d R&O adopts a new use and regulatory framework for broadcast spectrum through the extended hybrid FM mode. By failing to classify broadcasters expanded rights as *initial licenses* the Commission is ignoring its own precedent. The Commission needs to provide reasoned basis for departing from that precedent, and has not done so.

NPR’s argument regarding auction authority is also off-point. The Petition for Reconsideration is clear that *noncommercial* broadcast services are to be allocated without auctions, and therefore NPR’s interest in responding is unclear. Nonetheless, NPR contends that the “Commission’s auction authority is predicated on a threshold determination of *whether* to accept mutually exclusive applications, not a mandate to invite competing applications.”<sup>21</sup> However the Commission has a First Amendment responsibility to encourage diversity on the airwaves – giving away additional spectrum to incumbents on a non-contentious basis and is inconsistent with that mandate. For

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<sup>19</sup> Even if granting new rights were a “modification,” the modification would still be an “initial license” for purposes of the Commission’s auction authority. *See Petition* at 13.

<sup>20</sup> *Fresno Mobile Radio*, 165 F.3d at 970. *See also DirecTV, Inc. v. FCC*, 110 F.3d 816, 828 (D.C. Cir. 1997) (reclaimed licenses allocated under new regime are “initial” permits).

<sup>21</sup> *Opposition of NPR* at 7.

example, the Commission has been on notice for many years that hundreds of citizens are seeking access to the airwaves for community Low Power FM stations – they and many other potential users seem likely to apply if given the opportunity. In addition, iBiquity argues that “the Commission’s detailed technical rules and protections from co-channel and adjacent channel interference effectively preclude anyone else from using this spectrum.”<sup>22</sup> This is incorrect. Testing by NAB has demonstrated that separate antennas could be used for the analog and digital FM signals within specified limits and as a result the Commission has authorized “FM stations to implement the IBOC system without prior authority using separate antennas.”<sup>23</sup> And, as we explained in the petition,<sup>24</sup> the FCC cannot thwart congressional intent and avoid auctioning spectrum *to commercial nonexclusive uses* merely by refusing to take applications.

#### **V. THE MINIMAL PUBLIC INTEREST BENEFITS OF THE IBOC SYSTEM DO NOT OUTWEIGH THE BENEFITS OF LPFM AND UNLICENSED USES**

NAB, iBiquity, and NPR point to the potential public interest benefits of the IBOC system, including multi-programming streams for locally- and minority-oriented programming. NPR’s commitment to the public interest is commendable, and the *Petition* is not asking for reconsideration of non-commercial assignments.<sup>25</sup> Indeed, noncommercial stations are generally not auctioned and the Petitioners do not suggest that auctions are preferable to outright public interest inquiries. However, mutually exclusive commercial uses must be auctioned by statute.

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<sup>22</sup> *Opposition of iBiquity* at 4.

<sup>23</sup> 2d R&O at 37.

<sup>24</sup> *See Petition* at 15.

<sup>25</sup> *See Petition* at 15. “Congress has specified that spectrum shall be auctioned except for three, very narrow enumerated exceptions -- public safety radio services, noncommercial educational broadcasting, and digital television service.”

Even if the Commission did engage in an outright public interest balancing test between IBOC and competing potential uses, such as LPFM and unlicensed, the competing uses would win in the balance. The vast majority of commercial broadcasters have systematically lessened, if not neglected, their public interest obligations. The limited minority and locally oriented multicasting programming provided by a few commercial broadcasters does not balance out the millions of dollars in revenues commercial broadcasters will receive from datacasting and subscription services resulting from the extended hybrid IBOC system.

The public interest would be better served by allocating the spectrum for LPFM or unlicensed access instead of to incumbent users. As the Commission has found, noncommercial LPFM “serves specialized community needs that have not been well served by commercial broadcast stations” by creating “opportunities for new voices on the air waves and [allows] local groups, including schools, churches and other community-based organizations, to provide programming responsive to local community needs and interests . . . more . . . effectively than a commercial service.”<sup>26</sup> Unlicensed spectrum supports robust innovation in communications services and can help bring Internet services to underserved areas.<sup>27</sup>

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<sup>26</sup> See 15 FCC Rcd 2205, 2213 ¶ 17.

<sup>27</sup> Michael Calabrese & Sascha Meinrath, *The Feasibility of Unlicensed Broadband Devices to Operate on TV Band “White Space” Without Causing Harmful Interference: Myths & Facts*, Sept. 10, 2007, available at <http://www.newamerica.net/files/WhiteSpaceDevicesBackgrounder.pdf>.

## CONCLUSION

For the above stated reasons, the Commission should deny NAB, iBiquity, and NPR's Oppositions and grant NAF *et al.*'s *Petition for Reconsideration*.

Respectfully submitted,

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## CERTIFICATE OF SERVICE

I, Benjamin Lennett, hereby certify that a true and correct copy of the foregoing Reply to Oppositions of National Association of Broadcasters, iBiquity Digital Corporation and National Public Radio to the Petition for Reconsideration of New America, et al. was sent this 21st day of February, 2008 by first-class mail, postage prepaid, to the following:

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