



# PUBLIC NOTICE

Federal Communications Commission  
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Washington, D.C. 20554

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MM Docket No. 99-325

## COMMENT SOUGHT ON REQUEST FOR FM ASYMMETRIC SIDEBAND OPERATION AND ASSOCIATED TECHNICAL STUDIES

**Comment Date:** [21 days after date of publication in the Federal Register]  
**Reply Comment Date:** [35 days after date of publication in the Federal Register]

By this Public Notice, the Media Bureau (“Bureau”) solicits public comment on a recent development in the pending digital audio broadcasting proceeding, MM Docket No. 99-325,<sup>1</sup> and establishes deadlines for filing these comments.

On October 4, 2011, representatives of iBiquity Digital Corporation (“iBiquity”) and National Public Radio, Inc. (“NPR”) met with Bureau staff to discuss the possibility of permitting FM stations to operate with unequal digital sideband power levels. Concurrently with the submission of its *ex parte* meeting notice, iBiquity filed a technical report which discusses the field performance of asymmetric digital sideband operation by FM stations. Based on the report, iBiquity and NPR requested that the Commission authorize voluntary asymmetric digital sideband power for FM stations. Subsequently, on October 24, 2011, NPR filed a report which describes the results of field testing of asymmetric FM digital sidebands used in conjunction with testing of a newly-developed technology for reducing the peak-to-average power ratio in digital transmitters. The NPR Report concludes: “In sum, broadcasters are best off maintaining symmetrical sideband levels, but coverage improvements are possible with an increase of only one sideband.”<sup>2</sup>

The iBiquity and NPR technical reports are available electronically from the FCC’s Electronic Comment Filing System under MM Docket No. 99-325, at <http://fjallfoss.fcc.gov/ecfs/comment/view?id=6016844127> and <http://fjallfoss.fcc.gov/ecfs/document/view?id=7021717638>, respectively; or from the Commission’s duplicating contractor, Best Copy and Printing, Inc. (“BCPI”), 445 12<sup>th</sup> Street, SW, Room CY-B402, Washington, DC, 20554, 1-800-378-3160.

<sup>1</sup> See *Digital Audio Broadcasting Systems and Their Impact on the Terrestrial Radio Broadcast Service*, Second Report and Order, First Order on Reconsideration and Second Further Notice of Proposed Rulemaking, 22 FCC Rcd 10,344 (2007) (prior history omitted).

<sup>2</sup> NPR Report, page 8.

Currently, FM stations may operate only with equal power levels on the upper and lower primary digital sidebands. In the *First IBOC Order*,<sup>3</sup> the Commission authorized FM stations to commence hybrid digital broadcasting with digital effective radiated power of one percent (-20 dBc<sup>4</sup>) of the analog carrier level. In authorizing in-band on-channel (“IBOC”) operation for FM stations, the Commission observed: “The digital portion of the hybrid IBOC signal is transmitted on frequencies immediately adjacent to the main analog signal. Consequently, minimizing interference to stations on first- and, to a lesser extent, second-adjacent channels poses the most serious analog compatibility challenge. The [National Radio Systems Committee] concluded that ‘listeners within the protected contour [of the first-adjacent analog station] should not perceive an impact, but a limited number of listeners may perceive an impact outside of the protected contour under certain conditions.’”<sup>5</sup>

Early experience with FM IBOC operation, however, showed the one-percent digital power level to be insufficient to replicate analog coverage areas. In response to a request from a group of broadcasters, the Bureau issued its January 29, 2010, *Order*,<sup>6</sup> which authorized most FM stations to increase their digital power up to 6 dB (to -14 dBc) upon notification to the Commission, and some stations up to 10 dB (to -10dBc) by filing an informal application which demonstrates that certain contour non-overlap conditions are met with respect to other stations operating on the upper and lower first-adjacent channels.

A significant number of FM stations currently are precluded from taking advantage of the full 10 dB digital power increase permitted by the *Order* due to the presence of a nearby station on one but not both of the two first-adjacent channels. If asymmetric digital sideband operation is permitted, such stations presumably could increase their digital power on the sideband away from the limiting station. The two technical reports include data supporting iBiquity’s and NPR’s contention that such operations may improve a station’s digital coverage without causing interference.

By this notice, comment is sought on the iBiquity/NPR request and the iBiquity and NPR reports. We tentatively conclude that it would be expedient to modify Form FCC 335-FM, currently used for Digital Notifications, to accommodate requests for increased digital power and/or operation with asymmetric digital sideband power. Thus, we also seek comment on the process by which FM stations engaging in such operations would notify the Commission and how such notifications would be maintained in the Commission's electronic databases.

Interested parties may submit comments on or before 21 days after the date of publication of a summary of this *Public Notice* in the Federal Register, and reply comments on or before 35 days after date of publication of this *Public Notice* in the Federal Register. Comments and reply comments should specifically reference this *Public Notice* and MM Docket No. 99-325, and must be submitted in MM Docket No. 99-325. Pleadings sent via e-mail to the Commission will be considered informal and will not be part of the official record.

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<sup>3</sup> *Digital Audio Broadcasting Systems and Their Impact on the Terrestrial Radio Broadcast Service*, First Report and Order, 17 FCC Rcd 19990 (2002) (“*First IBOC Order*”).

<sup>4</sup> Decibels relative to analog carrier.

<sup>5</sup> *First IBOC Order*, at 19995.

<sup>6</sup> *Digital Audio Broadcasting Systems and Their Impact on the Terrestrial Radio Broadcast Service*, Order, 25 FCC Rcd 1182 (MB 2010) (“*Order*”).

Comments may be filed using: (1) the Commission's Electronic Comment Filing System (ECFS), (2) the Federal Government's eRulemaking Portal, or (3) paper copies.<sup>7</sup>

Electronic Filers: Comments may be filed electronically using the Internet by accessing the ECFS: <http://www.fcc.gov/cgb/ecfs/> or the Federal eRulemaking Portal: <http://www.regulations.gov>. Filers should follow the instructions provided on the website for submitting comments.

For ECFS filers, in completing the transmittal screen, filers should include their full name, U.S. Postal service mailing address, and the applicable docket number: MM Docket No. 99-325. Parties may also submit an electronic comment by Internet e-mail. To get filing instructions, filers should send an e-mail to [ecfs@fcc.gov](mailto:ecfs@fcc.gov), and include the following words in the body of the message: "get form". A sample form and instructions will be sent in response.

Paper Filers: Parties who choose to file by paper must file an original and four copies of each filing. Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail (although we continue to experience delays in receiving U.S. Postal Service mail). All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.

The Commission's contractor will receive hand-delivered or messenger-delivered paper filings for the Commission's Secretary at 236 Massachusetts Avenue, NE, Suite 110, Washington, D.C. 20002. The filing hours at this location are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes must be disposed of *before* entering the building.

Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743. U.S. Postal Service first-class mail, Express Mail, and Priority Mail should be addressed to 445 12<sup>th</sup> Street, SW, Washington, D.C. 20554.

***Ex parte status:*** This is a "permit-but-disclose" rulemaking proceeding for purposes of the Commission's *ex parte* rules. *See generally* 47 C.F.R. §§ 1.1200-1.1216. As a result of the permit-but-disclose status of this proceeding, *ex parte* presentations will be governed by the procedures set forth in Section 1.1206 of the Commission's rules applicable to non-restricted proceedings.<sup>8</sup>

Copies of the reports and any subsequently filed documents in this matter may be obtained electronically at <http://www.fcc.gov/e-file/ecfs.html>, and in paper form from BCPI during normal business hours in the Commission's Reference Information Center located at 445 12<sup>th</sup> Street, SW, Room CY-A257, Washington, DC, 20554. Alternate formats of this Public Notice (computer diskette, large print, audio recording, or Braille) are available to persons with disabilities by contacting the Consumer and Governmental Affairs Bureau at (202) 418-0530 or (202) 418-7365 (TTY).

For additional information, contact Susan Crawford, Peter Doyle, Ann Gallagher, or Charles Miller of the Audio Division at (202) 418-2700.

**By: Chief, Media Bureau**

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<sup>7</sup> *See Electronic Filing of Documents in Rulemaking Proceedings*, Report and Order, 13 FCC Rcd 11322, 11326 (1998) (¶ 8).

<sup>8</sup> *See* 47 C.F.R. § 1.1206.