

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

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

COMMENTS OF PROMETHEUS RADIO PROJECT

Media Access Project submits these comments on behalf of Prometheus Radio Project in response to the Commission’s Public Notice seeking further comment on the Joint Parties’ request for power increase and the subsequent studies filed by National Public Radio (“NPR”). *See Public Notice, Comment Sought on Specific Issues Regarding Joint Parties’ Request for FM Digital Power Increase and Associated Technical Studies, 24 FCCRcd 5818 (2009) (“Public Notice”).*

In these Comments, Prometheus Radio Project reiterates its objection to a blanket increase of the digital operating power using the in-band, on channel system (“IBOC”) from one percent to ten percent of a station’s authorized analog power. First, the Commission should not consider a power increase until it has adopted public interest obligations. Additionally, proponents of the increase have not yet addressed concerns regarding the impact a power increase will have on low power stations and the impact of self-interference. Moreover, analog service, which includes the low power service, must be protected from interference since analog service continues to be relied on by the vast majority of radio listeners.

I. A POWER INCREASE IS PREMATURE WITHOUT CONSIDERING PUBLIC INTEREST OBLIGATIONS.

The Commission is already considering public interest obligations to ensure that with the

additional programming capacity, broadcasters, in return for the exclusive use of the public airwaves, provide meaningful service to the public. *See* Second Further Notice of Proposed Rulemaking, 22 FCCRcd 10344, 10361 (2007). Even though many stations do not know what to do with their extra capacity, broadcasters have been resistant to public interest obligations that would further promote the Commission's goals of localism and diversity. Nonetheless, before any increase of power can be implemented, the Commission should allow for further comments on public interest obligations. Further comment would be necessary since any increase in power would be disruptive to the current scheme, and the public should have an opportunity to consider whether other or different public interest obligations are warranted.

II. ANY POWER INCREASE MUST BE DEFERRED UNTIL COMPLETION OF AND COMMENT ON THE NATIONAL PUBLIC RADIO STUDIES.

The Commission has requested comment on whether it should defer the power increase until completion of and comment on additional studies being conducted by NPR. *See* Public Notice. These studies will be concluded and presented in September 2009.¹ The Commission should not consider any power increase until further testing and comment. The Commission should not consider a power increase until it is aware of the impact of a digital increase on low power radio and self-interference.

Prometheus Radio Project, *et al.* have commented previously on the lack of information available regarding digital radio's interference to low power analog stations at current levels. *See generally* Comments of Prometheus Radio Project, *et al.* ("Prometheus Comments"); Reply Comments of Prometheus Radio Project, *et al.* ("Prometheus Reply Comments"). However, it is

¹ In an initial study, NPR has already found that IBOC transmission power at 10% caused unacceptable levels of interference to full power analog channels. *See National Public Radio, Report to the Corporation for Public Broadcasting, Digital Radio Coverage & Interference Analysis Research Project* (May 19, 2008).

unclear whether the additional tests conducted by NPR will resolve critical flaws of the studies submitted in this proceeding thus far. For instance, it is unknown if NPR's further studies will include the impact of a power increase on low power stations. The marked absence of data to demonstrate the effect of digital interference on low power stations will undermine the Commission's and the public's ability to effectively determine the impact of any power increase.

Another issue that requires attention before consideration of a power increase is that of self-interference. *See* Prometheus Comments at 4. Well-known engineer Doug Vernier has identified several cases of a station's digital signal causing interference to the analog host signal and a study conducted by the National Radio Systems Committee supports the conclusion of this phenomenon. *See* Prometheus Comments at 4 (citing Doug Vernier, *What Are We Doing to Ourselves, Exactly?*, Radio World Engineering Extra (Dec. 12, 2007); National Radio Systems Committee, *Evaluation of the iBiquity Digital Corporation IBOC System* at 58 (April 6, 2002), available at <http://www.nrscstandards.org/Reports/NRSC-R204%2520Part%2520I.pdf>). Again, it is unclear whether NPR's new studies will address this issue, and the Commission should not move forward until the issue of self-interference is clarified.

Thus, at a minimum, the Commission should not grant any power increase until NPR has submitted the results of its most recent studies. However, the Commission should only consider a power increase if these studies address the impact on LPFMs and the impact on a station's own analog signal.

III. THE RECORD DOES NOT SUPPORT AN INCREASE IN MAXIMUM DIGITAL OPERATING POWER.

The Commission has also asked whether the record in this proceeding warrants an increase in maximum digital operating power. *See* Public Notice. The current record does not support an increase in digital power because of the interference it will cause to existing analog stations and

tests submitted in the record this far have failed to address issues related to LPFMs and self interference, as discussed above.

For instance, the interference initially documented by NPR indicates that increasing power levels will have a substantial and detrimental effect on analog reception for both full and low power stations. That study found that of 78 million people within the protected service contours of 49 major market public radio stations, 16.7 million would experience interference as a result of an across-the-board 10 dB IBOC power increase. *See NPR Report*. Until interested parties have had a chance to review and submit comment on NPR's forthcoming study, the Commission has conflicting data regarding the effects of a power increase. Additionally, as other Comments have noted, the Commission's lack of consideration in finding alternatives to improving digital power and the lack of testing regarding LPFMs and self interference, fail to support the requested digital power increase. *See generally*, Prometheus Comments; Prometheus Reply Comments.

IV. LOW POWER AND FULL POWER ANALOG SIGNALS MUST BE PROTECTED FROM INTERFERENCE.

The Commission has also requested information regarding the protection of analog signals. *See* Public Notice. Any increase in power must protect analog signals, including existing and future low power FM stations. LPFMs are particularly vulnerable to an IBOC power increase because of the LPFM stations' smaller signal strength relative to full power stations. The protection of analog signals from interference is especially important because the majority of Americans still rely on analog radio for news and information. *See* Pew Project for Excellence in Journalism, *The State of the News Media – An Annual Report on American Journalism*, <http://www.stateofthemedial.org/2009/index.htm> (“Pew Project Report”).

Despite the advent of digital radio technology, very few listeners have adopted the new HD radio technology; a 2007 study demonstrates HD radio reaches less than 1% of the U.S.

population. *See, e.g.*, Bridge Ratings 2007 Competitive Media Usage Overview Update (May 23, 2007), <http://www.bridgeratings.com/press.05.23.07.CompMediaUse.htm> (“93.5% of Americans still listen [to analog radio] in an average week”). Additionally, awareness of HD radio dropped 2%, from 26% audience awareness in 2007 to 24% audience awareness in 2008. *See* Pew Project Report. Of the 24% of the audience that was aware of HD radio, only 6% were “very interested” in HD Radio. *See id.* Further, fewer broadcast stations are converting to HD; a recent study shows only 185 stations switched in 2008, compared to 394 stations that switched in 2007. *See id.* Similarly, IBOC currently relies on a proprietary technology that prohibits innovation or participation by others, a shortfall that clearly limits the potential of the new service. Consequently, it is unlikely that HD radio will strongly penetrate the American market in the near future. Thus, the Commission must ensure that stations operating on analog signals are protected from significant interference.

V. CONCLUSION

To ensure that the public benefits from any power increase, the Commission should not consider an increase in power without further comments on public interest obligations. The Commission also should acknowledge that a digital power increase could compromise analog FM radio and should not consider a power increase until questions regarding self-interference and interference to LPFM stations are resolved. Finally, any consideration of a power increase must ensure that the analog service, which includes the low power service, is protected from interference since analog service continues to be relied on by the vast majority of radio listeners.

Respectfully submitted,

/s/

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