Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
	)	
Petition for Rulemaking to Allow the MA3	)	RM-11836
All-Digital Mode of HD Radio for AM Stations	)	
	)	
Revitalization of the AM Radio Service	)	MB Docket No. 13-249

COMMENTS OF
THE NATIONAL ASSOCIATION OF BROADCASTERS

The National Association of Broadcasters (NAB)[1] submits these comments in support of the above-captioned Petition for Rulemaking, which asks the Commission to initiate a proceeding to allow AM radio stations to voluntarily broadcast in the MA3 all-digital mode of HD radio.[2] We agree with the Petitioner that all-digital AM service will allow broadcasters to provide substantially improved sound quality that could help AM stations to retain and attract listeners in the increasingly competitive audio marketplace. Experimental testing and real-world implementation of all-digital AM, and industry interest in launching all-digital AM services all support further consideration of rules to facilitate broadcasters' voluntary transition to all-digital AM service.

The Petition documents the technical challenges faced by AM broadcasters. The proliferation of fluorescent light bulbs, computer monitors, flat screen TVs, cell phone chargers and other Part 15 devices have all contributed to a higher "noise floor," causing

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[1] NAB is a nonprofit trade association that advocates on behalf of local radio and television stations and broadcast networks before Congress, the Federal Communications Commission and other federal agencies, and the courts.

[2] Petition for Rulemaking to Further AM Revitalization, Bryan Broadcasting Corporation (BBC), RM-11836, MB Docket No. 13-249 (Mar. 25, 2019) (Petition); Public Notice, *Consumer & Governmental Affairs Bureau Reference Information Center Petition for Rulemakings Filed*, Report No. 3123 (Apr. 11, 2019).

pervasive interference to AM radio service. Indeed, some auto manufacturers are simply excluding AM radio from their all-electric vehicle dashboard radios due to electromagnetic noise.[3] Music formats on the AM band have decreased substantially, as listeners turn to FM, satellite radio and online streaming services that offer better sound quality. In turn, AM listenership and station revenue have significantly declined and show few signs of recovery. Indeed, over six years ago the Commission declared that the "sustainability of the AM broadcast service has been threatened by the migration of AM listeners to newer media services,"[4] and recounted the "daunting technical and competitive challenges" faced by AM stations;[5] challenges that have only increased since then. Today, AM radio audience share and advertising revenues continue to wane.[6]

As the Petitioner explains, a voluntary transition to all-digital AM service could help to reverse this trend by enabling broadcasters to provide a pristine signal, free of the interference that plagues analog AM service and deters listeners.[7] Since 2012, NAB's broadcast technology innovation initiative Pilot, in cooperation with Xperi, transmitter manufacturers, numerous AM radio stations and others, has conducted a series of field and laboratory tests of the HD Radio all-digital AM system under a variety of conditions, with the goal of developing a technical record of operation in this mode.[8] These experiments validate

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[3] Chester Dawson, *Your Tesla Can Go Zero to 60 in 2.5 Seconds But Can't Get AM Radio*, Wall Street Journal (Nov. 6, 2018).
[4] Notice of Proposed Rulemaking, *Revitalization of the AM Radio Service*, 28 FCC Rcd 15221, 15222 (2013).
[5] *Id*. at 15228.
[6] Comments of the National Association of Broadcasters, *2018 Quadrennial Regulatory Review – Review of the Commission's Broadcast Ownership Rules and Other Rules Adopted Pursuant to Section 202 of the Telecommunications Act of 1996;* MB Docket No. 18-349 (Apr. 29, 2019), at 34-35.
[7] Petition at 3.
[8] *See* https://nabpilot.org/work/projects/all-digital-am-radio-testing/. Pilot was previously known as NAB Labs.

the successful performance of all-digital AM radio service and certainly justify the Commission's consideration of rules to allow broadcasters to transition to this mode on a voluntary basis.

Real-world experience with all-digital AM service further underscores its potential. Pursuant to Commission experimental authority, Hubbard Radio's WWFD-AM (Frederick, MD) has turned off its analog signal while remaining in all-digital mode.[9] NAB understands that WWFD's digital signal is robust and far more listenable than analog service.[10] Hubbard has received encouraging feedback from listeners and informed NAB that it would consider transitioning additional AM stations to all-digital broadcasting, if permitted. The record in response to the Petition concurs as numerous AM broadcasters express interest in pursuing all-digital service.[11] Moreover, allowing all-digital AM service on a voluntary basis should accelerate adoption by proving the technical and financial proof-of-concept of all-digital AM for broadcasters who prefer a wait-and-see approach before investing.

All-digital AM service would not only provide broadcasters with a critical tool to retain listeners, it will be an important promotional means for attracting new listeners. Xperi notes that all-digital service also allows broadcasters to transmit metadata along with the audio content that provides program title, artist information, album artwork, station logo and other key information that listeners used to digital audio sources now expect.[12] Xperi also explains that transmitter equipment already in the market will support all-digital AM service, and that over 50 million HD Radio receivers currently in the marketplace will support all-digital AM

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[9] WWFD also simulcasts its AM signal on an FM translator.
[10] *All-Digital AM Grabs Automakers' Interest*, Inside Radio (Oct. 1, 2018).
[11] *See, e.g.*, Comments of Bradford Caldwell, RM-11836 (May 7, 2019); Comments of Julie Hein, RM-11836 (May 6, 2019); Comments of Crawford Broadcasting Company, RM-11836 (Apr. 30, 2019).
[12] Comments of Xperi Corporation, RM-11836 (May 6, 2019).

functionality from day one. Thus, the benefits of authorizing all-digital AM service will be widespread and immediate for broadcasters and listeners alike.[13]

Finally, the optional nature of BBC's approach should allay any concerns about the effect of transitioning to all-digital AM on listener access. The decision whether to transition will rest with the appropriate stakeholder, the local broadcaster who is most familiar with the needs and interests of their community and most knowledgeable about the penetration of HD Radio receivers in their market. If a broadcaster perceives their market as desirable for all-digital, they will proceed. If not, they will have the discretion to wait until more HD Radio receivers are present in the market or other developments occur. We also note that the widespread use of FM translators to rebroadcast AM stations will further limit the audience impact of a station's transition to all-digital, as many listeners will still be able to access a transitioned AM station on the FM dial, if they lack an HD receiver.

AM broadcasters face technical and competitive challenges that will only increase going-forward, and all-digital AM service could provide a valuable tool to overcome these challenges by allowing broadcasters to provide sound quality equal to SiriusXM, Spotify and other digital services. HD Radio is a mature technology, and both testing and real-world experience confirm the technical performance of all-digital AM service. Finally, industry interest in transitioning to this mode of operation is apparent, as broadcasters are standing by for the opportunity to consider whether all-digital AM would be right for their market.

[13] *Id*. at 4.

For these reasons, NAB respectfully requests that the Commission promptly grant BBC's request to initiate a rulemaking proceeding to consider rules to allow AM stations to transition to all-digital AM service on a voluntary basis.[14]

Respectfully submitted,

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[14] NAB notes that the present allocation and assignment rules for AM broadcast stations may require adjustment to consider coverage for all-digital operations, as well as digital-to-digital and analog-to-digital interference conditions. Inasmuch as the U.S. is a signatory to various treaties and other international agreements involving standard broadcast (AM) stations, similar adjustments may also be needed to those documents.