

Radio TechCheck

The Weekly NAB Newsletter for Radio Broadcast Engineers



NAB LABS

FCC Releases Text of Notice of Proposed Rule Making on Revitalization of the AM Radio Service

At the 2012 NAB Radio Show in Dallas, Texas, Commissioner Ajit Pai used the occasion of his speech to propose that the Commission should launch an AM Radio Revitalization Initiative and conduct a comprehensive review of all the AM radio rules. At the 2013 NAB Radio show in Orlando, Florida, FCC Acting Chairwoman Mignon Clyburn made a welcome follow-on announcement to radio broadcasters during her speech:

"And I am happy to confirm that this morning I circulated a Notice of Proposed Rulemaking, which will represent the next major step in the Commission's review of AM service, building on the work we have been doing over the last few years."

The text of that NPRM was released on Thursday, October 31. Commissioner Ajit Pai's enthusiasm was clear in his statement attached to the item, ending with: *"And now, the fun begins. Let's get to work revitalizing AM radio."*

Below is a summary of items that are included in the NPRM.

Exclusive FM Translator Filing Window

The FCC tentatively concluded that it should afford an exclusive opportunity, for AM licensees and permittees, to apply for authorizations for new FM translator stations for the sole purpose of enhancing existing AM service to the public. They proposed to open a one-time filing window during which only AM broadcasters may participate, and in which each may apply for one new FM translator station, to be used to re-broadcast the broadcaster's AM signal to provide fill-in and/or nighttime service. The window would have the following conditions:

- Eligible applicants must be AM broadcast licensees or permittees, and may apply for only one FM translator per AM station.
- The translator must be located so that no part of its 60 dB μ contour will extend beyond the smaller of a 25-mile radius from the AM station's transmitter site, or the AM station's daytime 2 mV/m contour.
- The FM translator station may only be authorized to the AM primary station it rebroadcasts, rather than an independent party; the FM translator may only be used to rebroadcast the signal of the AM station to which it is linked (or originate nighttime programming during periods when a daytime-only AM station is not operating); and the authorization for such an FM translator station will only be issued subject to the condition that it may not be assigned or transferred

except in conjunction with the primary AM station that it re-broadcasts and with which it is commonly owned.

Modification of Daytime Community Coverage Standards For Existing AM Stations

Currently, a commercial radio station must provide daytime coverage to its entire community of license, although this rule is routinely waived by the FCC, so long as an appropriate showing is submitted that it will encompass 80 percent of the community of license's area or population within the station's 5 mV/m contour. The FCC proposed modifying the daytime community coverage requirement, for licensed AM facilities only, to require that the station cover either 50 percent of the population or 50 percent of the area of the community of license with a daytime 5 mV/m principal community signal.

Modification of Nighttime Community Coverage Standards For Existing AM Stations

The current nighttime coverage rules require that (non-Class D) AM broadcasters maintain a signal at night sufficient to cause 80 percent of the area or population of the broadcaster's principal community to be encompassed by the nighttime 5 mV/m contour or the nighttime interference-free contour, whichever value is higher. The FCC proposed in the NPRM that the nighttime coverage requirement be eliminated for existing licensed AM stations, and be modified to require that new AM stations and AM stations seeking a change to their communities of license cover either 50 percent of the population or 50 percent of the area of the community of license with a nighttime 5 mV/m signal or a nighttime interference-free contour, whichever value is higher.

Elimination of the AM "Ratchet Rule"

The so-called "ratchet rule" requires that an AM broadcaster seeking to make facility changes, which would modify its AM signal, demonstrate that the improvements will result in an overall reduction in the amount of skywave interference that it causes to certain other AM stations. Responding to petitions that the ratchet rule has more disadvantages than advantages and has in some cases discouraged stations from service improvements, the FCC proposed to delete the ratchet rule by deleting note 1 to Section 73.182(q) of the Rules.

Wider Implementation of Modulation Dependent Carrier Level Control Technologies

In September 2011, the FCC released a Public Notice stating that it would permit AM stations, by rule waiver or experimental authorization, to use transmitter control techniques that vary either the carrier power level or both the carrier and sideband power levels as a function of the modulation level. Known as Modulation Dependent Carrier Level ("MDCL") control technologies, this allows AM licensees to reduce power consumption while maintaining audio quality and coverage areas. In the NPRM, the FCC proposed that an AM station may commence operation using MDCL control technology without prior Commission authority, provided that the AM station licensee notifies the Commission of the station's MDCL control operation within 10 days after commencement.

Modification of AM Antenna Efficiency Standards

Under the current FCC rules, "all applicants for new, additional, or different AM station facilities and all licensees requesting authority to change the transmitting system site of an existing station must specify an antenna system, the efficiency of which complies with the requirements for the class and power of station." In the NPRM, the FCC seeks comment on a proposal to reduce the minimum field strength values set forth in Sections 73.182(m) and 73.189(b)(2)(i) – (iii) of the Rules by approximately 25 percent, offering AM broadcasters some relief by enabling them to propose shorter antennas.

The NPRM also recognizes, but does not make proposals with regard to other ideas that have been proposed for revitalizing AM radio such as changes to nighttime skywave protection for Class A AM stations, adopting rules to permit the permanent licensing of AM synchronous transmission systems, permitting or requiring stations to convert to all-digital AM operation, and modification of the pre-sunrise / post-sunset AM operating rules. Stating that these reforms would require additional comment, research, and analysis, the FCC is encouraging parties to submit comments for the purpose of advancing these and any other specific proposals that would help revitalize and improve the long term future of the AM broadcast service.

The NPRM on AM revitalization can be downloaded [here](#). Comments will be due 60 days after the NPRM is published in the Federal Register.

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