

October 15, 2012



# TV TechCheck



The Weekly NAB Newsletter for Television Broadcast Engineers

## FCC Seeks To Update and Refresh its Record in the Wireless Microphones Proceeding

On October 5, 2012 the FCC released a [Public Notice](#) inviting interested parties to update and refresh the record on two issues from the Commission's 2010 Wireless Microphone proceeding. In general the Commission seeks comment on:

- Whether they should provide for a limited expansion of license eligibility that would permit some unlicensed wireless microphones (and other low power auxiliary station users) to operate in the TV bands on a licensed basis under Part 74 of the rules and,
- What steps the Commission should take to promote more efficient use of this spectrum by wireless microphones.

In January 2010, the FCC released a [Report and Order and Further Notice of Proposed Rulemaking](#) that required wireless microphones and other low auxiliary stations to cease operation in the 700 MHz band (i.e. channels 52 – 69) as of June 12, 2010. That order also authorized the use of wireless microphones, on an unlicensed basis, by entities not currently eligible to obtain licenses. In addition, the Further Notice portion asked for comment on a range of issues concerning the operation of wireless mics and low power devices in the core TV bands. (See January 25 2010 TechCheck)

Subsequently, in the TV White Spaces Second MO&O adopted in September 2010, the FCC addressed the operations of both licensed and unlicensed wireless microphones with respect to unlicensed white space devices. That order, among other things, established a process by which licensees could register their wireless microphones (and related low power auxiliary station operations) in the [TV bands databases](#) so that they may be protected from interference from unlicensed white space devices on available channels at specified times. The order also permitted certain unlicensed microphone users to register their wireless microphone operations in the TV bands databases. (see September 27, 2010 TV TechCheck)

On September 28, 2012 the FCC adopted the Incentive Auctions [Notice of Proposed Rulemaking](#) in which they propose to repack the television bands. Noting that this action may reduce the spectrum available in the TV bands for secondary use by licensed and unlicensed wireless microphones as well as for unlicensed white space devices, the Commission sought comment on various proposals that would affect each of these operations.

The Public Notice states that considering the time that has passed since the Commission issued the Wireless Microphones Further Notice, and in light of the TV White Spaces Second MO&O and the recently issued Incentive Auctions NPRM, the FCC asks for input on the following issues.

- **Expansion of Part 74 eligibility.** Whether the Commission should expand license eligibility under Part 74, Subpart H for certain operators of unlicensed wireless mics or other low power auxiliary devices at specified venues. Should there be technical or operational conditions e.g. the size of the venue, number mics in use or whether they are employed as part of a “professional quality production.”
- **Expanding eligibility for operations at nuclear facilities.** Currently nuclear power plants are permitted, under specific circumstances, to use low power auxiliary stations (e.g. wireless intercoms) that operate in the TV bands. The public notice asks to refresh the record regarding the possibility of expanding eligibility to allow nuclear power plant operators to obtain licenses under Part 90 to operate certain low power auxiliary station equipment, certificated for use under Subpart H of Part 74 of the rules, both inside and outside nuclear facilities.
- **More efficient wireless microphones through technological advancements.** The Public notice seek comment on whether employing new microphone technology could enable more efficient use of spectrum. It notes that the

majority of mics currently in use are analog FM modulated operating with up to a 200 kHz bandwidth. However due to technical limitations only six to eight mics can operate in one TV channel. The FCC asks if it should, for example, require a reduced bandwidth or mandate the use of digital modulation so that more mics could operate in a TV channel.

Responses to the Public Notice are due 30 days after it is published in the Federal Register. A copy is available [here](#). For more general information regarding the FCC's wireless microphone policies visit the [FCC website](#).



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