

§ 27.54

power. With respect to television operations, measurements must be made of the separate visual and aural operating powers at sufficiently frequent intervals to ensure compliance with the rules.

(7) Alternative out of band emission limit. Licensees in this service may establish an alternative out of band emission limit to be used at specified band edge(s) in specified geographical areas, in lieu of that set forth in this section, pursuant to a private contractual arrangement of all affected licensees and applicants. In this event, each party to such contract shall maintain a copy of the contract in their station files and disclose it to prospective assignees or transferees and, upon request, to the FCC.

(m) When an emission outside of the authorized bandwidth causes harmful interference, the Commission may, at its discretion, require greater attenuation than specified in this section.

[62 FR 16497, Apr. 7, 1997, as amended at 65 FR 3147, Jan. 20, 2000; 65 FR 17602, Apr. 4, 2000; 65 FR 42883, July 12, 2000; 67 FR 5511, Feb. 6, 2002; 67 FR 41855, June 20, 2002; 69 FR 5715, Feb. 6, 2004; 69 FR 72033, Dec. 10, 2004; 69 FR 77950, Dec. 29, 2004; 70 FR 1190, Jan. 6, 2005; 70 FR 21664, Apr. 27, 2005]

§ 27.54 Frequency stability.

The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

§ 27.55 Signal strength limits.

(a) *Field strength limits.* For the following bands, the predicted or measured median field strength at any location on the geographical border of a licensee's service area shall not exceed the value specified unless the adjacent affected service area licensee(s) agree(s) to a different field strength. This value applies to both the initially offered service areas and to partitioned service areas.

(1) 2110–2155, 2305–2320 and 2345–2360 MHz bands: 47 dB μ V/m.

(2) 698–764 and 776–794 MHz bands: 40 dB μ V/m.

(3) The paired 1392–1395 MHz and 1432–1435 MHz bands and the unpaired 1390–1392 MHz band (1.4 GHz band): 47 dB μ V/m.

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(4) BRS and EBS: The predicted or measured median field strength at any location on the geographical border of a licensee's service area shall not exceed the value specified unless the adjacent affected service area licensee(s) agree(s) to a different field strength. This value applies to both the initially offered services areas and to partitioned services areas. Licensees may exceed this signal level where there is no affected licensee that is constructed and providing service. Once the affected licensee is providing service, the original licensee will be required to take whatever steps necessary to comply with the applicable power level at its GSA boundary, absent consent from the affected licensee.

(i) Prior to transition, the signal strength at any point along the licensee's GSA boundary does not exceed the greater of that permitted under the licensee's Commission authorizations as of January 10, 2005 or 47 dB [m μ]V/m.

(ii) Following transition, for stations in the LBS and UBS, the signal strength at any point along the licensee's GSA boundary must not exceed 47 dB[m μ]V/m. This field strength is to be measured at 1.5 meters above the ground over the channel bandwidth (*i.e.*, each 5.5 MHz channel for licensees that hold a full channel block, and for the 5.5 MHz channel for licensees that hold individual channels).

(iii) Following transition, for stations in the MBS, the signal strength at any point along the licensee's GSA boundary must not exceed $-73.0 + 10\log(X/6)$ dBW/m², where X is the bandwidth in MHz of the channel.

(b) *Power flux density limit.* For base and fixed stations operating in the 698–746 MHz band, with an effective radiated power (ERP) greater than 1 kW, the power flux density that would be produced by such stations through a combination of antenna height and vertical gain pattern must not exceed 3000 microwatts per square meter on the ground over the area extending to 1 km from the base of the antenna mounting structure.

[69 FR 5715, Feb. 6, 2004, as amended at 69 FR 72034, Dec. 10, 2004]