(ii) If this distance is greater than 42 km and less than or equal to 46 km, the station is Class B1.

(iii) If this distance is greater then 46 km and less than or equal to 78 km, the station is Class B.

[52 FR 37788, Oct. 9, 1987; 52 FR 39920, Oct. 26, 1987, as amended at 54 FR 16367, Apr. 24, 1989; 54 FR 19374, May 5, 1989; 54 FR 35339, Aug. 25, 1989; 65 FR 79777, Dec. 20, 2000]

§ 73.211 Power and antenna height requirements.

(a) *Minimum requirements.* (1) Except as provided in paragraphs (a)(3) and (b)(2) of this section, FM stations must operate with a minimum effective radiated power (ERP) as follows:

(i) The minimum ERP for Class A stations is 0.1 kW.

(ii) The ERP for Class B1 stations must exceed 6 kW.

(iii) The ERP for Class B stations must exceed 25 kW.

(iv) The ERP for Class C3 stations must exceed 6 kW.

(v) The ERP for Class C2 stations must exceed 25 kW.

(vi) The ERP for Class C1 stations must exceed 50 kW.

(vii) The minimum ERP for Class C and C0 stations is 100 kW.

(2) Class C0 stations must have an antenna height above average terrain (HAAT) of at least 300 meters (984 feet). Class C stations must have an antenna height above average terrain (HAAT) of at least 451 meters (1480 feet).

(3) Stations of any class except Class A may have an ERP less than that specified in paragraph (a)(1) of this section, provided that the reference distance, determined in accordance with paragraph (b)(1)(i) of this section, exceeds the distance to the class contour for the next lower class. Class A stations may have an ERP less than 100 watts provided that the reference distance, determined in accordance with paragraph (b)(1)(i) of this section, equals or exceeds 6 kilometers.

(b) *Maximum limits.* (1) Except for stations located in Puerto Rico or the Virgin Islands, the maximum ERP in any direction, reference HAAT, and distance to the class contour for each FM station class are listed below:

Station class	Maximum ERP	Reference HAAT in meters (ft.)	Class contour distance in kilometers
A	6 kW (7.8 dBk)	100 (328)	28
B1	25 kW (14.0 dBk)	100 (328)	39
B	50 kW (17.0 dBk)	150 (492)	52
C3	25 kW (14.0 dBk)	100 (328)	39
C2	50 kW (17.0 dBk)	150 (492)	52
C1	100 kW (20.0 dBk)	299 (981)	72
C0	100 kW (20.0 dBk)	450 (1476)	83
C	100 kW (20.0 dBk)	600 (1968)	92

(i) The reference distance of a station is obtained by finding the predicted distance to the 1mV/m contour using Figure 1 of § 73.333 and then rounding to the nearest kilometer. Antenna HAAT is determined using the procedure in § 73.313. If the HAAT so determined is less than 30 meters (100 feet), a HAAT of 30 meters must be used when finding the predicted distance to the 1 mV/m contour.

(ii) If a station's ERP is equal to the maximum for its class, its antenna HAAT must not exceed the reference HAAT, regardless of the reference distance. For example, a Class A station operating with 6 kW ERP may have an antenna HAAT of 100 meters, but not 101 meters, even though the reference distance is 28 km in both cases.

(iii) Except as provided in paragraph (b)(3) of this section, no station will be authorized in Zone I or I-A with an ERP equal to 50 kW and a HAAT exceeding 150 meters. No station will be authorized in Zone II with an ERP equal to 100 kW and a HAAT exceeding 600 meters.

(2) If a station has an antenna HAAT greater than the reference HAAT for its class, its ERP must be lower than the class maximum such that the reference distance does not exceed the class contour distance. If the antenna HAAT is so great that the station's ERP must be lower than the minimum ERP for its class (specified in paragraphs (a)(1) and (a)(3) of this section), that lower ERP will become the minimum for that station.

(3) For stations located in Puerto Rico or the Virgin Islands, the maximum ERP in any direction, reference HAAT, and distance to the class contour for each FM station class are listed below:

Station class	Maximum ERP	Reference HAAT in meters (ft.)	Class contour distance in kilometers
A	6kW (7.8 dBk)	240 (787)	42
B1	25kW (14.0 dBk)	150 (492)	46
B	50kW (17.0 dBk)	472 (1549)	78

(c) *Existing stations.* Stations authorized prior to March 1, 1984 that do not conform to the requirements of this section may continue to operate as authorized. Stations operating with facilities in excess of those specified in paragraph (b) of this section may not increase their effective radiated powers or extend their 1 mV/m field strength contour beyond the location permitted by their present authorizations. The provisions of this section will not apply to applications to increase facilities for those stations operating with less than the minimum power specified in paragraph (a) of this section.

(d) *Existing Class C stations below minimum antenna HAAT.* Class C stations authorized prior to January 19, 2001 that do not meet the minimum antenna HAAT specified in paragraph (a)(2) of this section for Class C stations may continue to operate as authorized subject to the reclassification procedures set forth in Note 4 to § 73.3573.

[53 FR 17042, May 13, 1988, as amended at 54 FR 16367, Apr. 24, 1989; 54 FR 19374, May 5, 1989; 54 FR 35339, Aug. 25, 1989; 65 FR 79777, Dec. 20, 2000]

§ 73.212 Administrative changes in authorizations.

(a) In the issuance of FM broadcast station authorizations, the Commission will specify the transmitter output power and effective radiated power in accordance with the following tabulation:

Power (watts or kW)	Rounded out to nearest figure (watts or kW)
1 to 3	.05
3 to 10	.1
10 to 30	.5
30 to 100	1
100 to 300	5
300 to 1,000	10

(b) Antenna heights above average terrain will be rounded out to the nearest meter.

[28 FR 13623, Dec. 14, 1963, as amended at 48 FR 29506, June 27, 1983]

§ 73.213 Grandfathered short-spaced stations.

(a) Stations at locations authorized prior to November 16, 1964, that did not meet the separation distances required by § 73.207 and have remained continuously short-spaced since that time may be modified or relocated with respect to such short-spaced stations, *provided that* (i) any area predicted to receive interference lies completely within any area currently predicted to receive co-channel or first-adjacent channel interference as calculated in accordance with paragraph (a)(1) of this section, or that (ii) a showing is provided pursuant to paragraph (a)(2) of this section that demonstrates that the public interest would be served by the proposed changes.

(1) The F(50,50) curves in Figure 1 of § 73.333 are to be used in conjunction with the proposed effective radiated power and antenna height above average terrain, as calculated pursuant to § 73.313(c), (d)(2) and (d)(3), using data for as many radials as necessary, to determine the location of the desired (service) field strength. The F(50,10) curves in Figure 1a of § 73.333 are to be used in conjunction with the proposed effective radiated power and antenna height above average terrain, as calculated pursuant to § 73.313(c), (d)(2) and (d)(3), using data for as many radials as necessary, to determine the location of the undesired (interfering) field strength. Predicted interference is defined to exist only for locations where the desired (service) field strength exceeds 0.5 mV/m (54 dBu) for a Class B station, 0.7 mV/m (57 dBu) for a Class B1 station, and 1 mV/m (60 dBu) for any other class of station.

(i) Co-channel interference is predicted to exist, for the purpose of this section, at all locations where the undesired (interfering station) F(50,10) field strength exceeds a value 20 dB below the desired (service) F(50,50) field strength of the station being considered (e.g., where the protected field strength is 60 dBu, the interfering field