

that are likely to need additional capacity in the future.

(b) If technical problems are addressed by an agreement or operating agreement between the licensees that would result in a reduction of quality or capacity of either system, the licensees must notify the Commission by updating FCC Form 601.

[59 FR 59507, Nov. 17, 1994, as amended at 63 FR 68951, Dec. 14, 1998; 82 FR 17582, Apr. 12, 2017]

#### § 22.909 Cellular markets.

Cellular Market Areas (CMAs) are standard geographic areas used by the FCC for administrative convenience in the licensing of Cellular systems. CMAs comprise Metropolitan Statistical Areas (MSAs) and Rural Service Areas (RSAs). All CMAs and the counties they comprise are listed in: "Common Carrier Public Mobile Services Information, Cellular MSA/RSA Markets and Counties," *Public Notice*, Rep. No. CL-92-40, 7 FCC Rcd 742 (1992).

(a) *MSAs*. Metropolitan Statistical Areas are 306 areas, including New England County Metropolitan Areas and the Gulf of Mexico Service Area (water area of the Gulf of Mexico, border is the coastline), defined by the Office of Management and Budget, as modified by the FCC.

(b) *RSAs*. Rural Service Areas are 428 areas, other than MSAs, established by the FCC.

[59 FR 59507, Nov. 17, 1994, as amended at 79 FR 72151, Dec. 5, 2014]

#### § 22.911 Cellular geographic service area.

The Cellular Geographic Service Area (CGSA) of a Cellular system is the geographic area considered by the FCC to be served by the Cellular system and is the area within which cellular systems are entitled to protection and adverse effects for the purpose of determining whether a petitioner has standing are recognized. The CGSA is the composite of the service areas of all of the cells in the system, excluding any Unserved Area (even if it is served on a secondary basis) or area within the CGSA of another Cellular system. The service area of a cell is the area within its service area boundary (SAB). Licensees that use power spectral density

(PSD) at cell sites within their licensed geographic area are subject to paragraph (c) of this section; all other licensees are subject to paragraph (a) (or, as applicable, paragraph (b)) of this section. If the calculation under paragraph (a), (b), or (c) of this section (as applicable) yields an SAB extension comprising at least 130 contiguous square kilometers (50 contiguous square miles), the licensee must submit an application for major modification of the CGSA using FCC Form 601. *See also* §§ 22.912, 22.949, and 22.953.

(a) *CGSA determination (non-PSD)*. For the purpose of calculating the SABs for cell sites and determining CGSA expansion areas for Cellular base stations that do not operate using PSD (as permitted under § 22.913), the distance to the SAB is calculated as a function of effective radiated power (ERP) and antenna center of radiation height above average terrain (HAAT), height above sea level (HASL), or height above mean sea level (HAMSL).

(1) Except as provided in paragraphs (a)(2) and (b) of this section, the distance from a cell transmitting antenna to its SAB along each cardinal radial is calculated as follows:

$$d = 2.531 \times h^{0.34} \times p^{0.17}$$

where:

d is the radial distance in kilometers

h is the radial antenna HAAT in meters

p is the radial ERP in Watts

(2) The distance from a cell transmitting antenna located in the Gulf of Mexico Service Area (GMSA) to its SAB along each cardinal radial is calculated as follows:

$$d = 6.895 \times h^{0.30} \times p^{0.15}$$

Where:

d is the radial distance in kilometers

h is the radial antenna HAAT in meters

p is the radial ERP in Watts

(3) The value used for h in the formula in paragraph (a)(2) of this section must not be less than 8 meters (26 feet) HASL (or HAMSL, as appropriate for the support structure). The value used for h in the formula in paragraph (a)(1) of this section must not be less than 30 meters (98 feet) HAAT, except that for unserved area applications proposing a cell with an ERP not exceeding 10