the same channel block in adjacent cellular markets may agree to allow SAB extensions into their CGSA and/or unserved areas in their cellular markets during the five year build-out period of the market into which the SAB extends.

(c) *Same applicant/licensee.* Except as restricted in paragraph (d) of this section, licensees of cellular systems that are also an applicant or licensee on the same channel block in adjacent cellular markets may, at any time, allow or propose SAB extensions from their adjacent market system into their CGSH only (not into unserved areas). Except as restricted in paragraph (d) of this section, licensees of the first authorized cellular systems that are also an applicant or licensee on the same channel block in adjacent cellular markets may allow or propose SAB extensions from their adjacent market system into their CGSA and/or unserved areas in their cellular markets during the five year build-out period of the market into which the SAB extends.

(d) *Unserved area systems.* Phase I initial cellular applications must not propose SAB extensions. Phase I sole major modification applications and Phase II applications may propose SAB extensions, subject to the conditions in this section.

[59 FR 59507, Nov. 17, 1994, as amended at 68 FR 42295, July 17, 2003]

§ 22.913 Effective radiated power limits.

The effective radiated power (ERP) of transmitters in the Cellular Radiotelephone Service must not exceed the limits in this section.

(a) *Maximum ERP.* In general, the effective radiated power (ERP) of base transmitters and cellular repeaters must not exceed 500 Watts. However, for those systems operating in areas more than 72 km (45 miles) from international borders that:

(1) Are located in counties with population densities of 100 persons or fewer per square mile, based upon the most recently available population statistics from the Bureau of the Census; or,

(2) Extend coverage on a secondary basis into cellular unserved areas, as those areas are defined in § 22.949, the ERP of base transmitters and cellular

repeaters of such systems must not exceed 1000 Watts. The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 Watts.

(b) *Height-power limit.* The ERP of base transmitters must not exceed the amount that would result in an average distance to the service area boundary of 79.1 kilometers (49 miles) for cellular systems authorized to serve the Gulf of Mexico MSA and 40.2 kilometers (25 miles) for all other cellular systems. The average distance to the service area boundary is calculated by taking the arithmetic mean of the distances determined using the procedures specified in § 22.911 for the eight cardinal radial directions.

(c) *Coordination exemption.* Licensees need not comply with the height-power limit in paragraph (b) of this section if the proposed operation is coordinated with the licensees of all affected cellular systems on the same channel block within 121 kilometers (75 miles) and concurrence is obtained.

[59 FR 59507, Nov. 17, 1994, as amended at 69 FR 75171, Dec. 15, 2004]

§ 22.917 Emission limitations for cellular equipment.

The rules in this section govern the spectral characteristics of emissions in the Cellular Radiotelephone Service.

(a) *Out of band emissions.* The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB.

(b) *Measurement procedure.* Compliance with these rules is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. In the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (*i.e.* 100 kHz or 1 percent of emission bandwidth, as specified). The emission bandwidth is defined as the width of the signal between two points,