TECHNICAL STANDARDS

§ 27.1220 Transmission standards.

The width of a channel in the LBS and UBS is 5.5 MHz, with the exception of BRS channels 1 and 2 which are 6.0 MHz. The width of all channels in the MBS is 6 MHz. However, the licensee may subchannelize its authorized bandwidth, provided that digital modulation is employed and the aggregate power does not exceed the authorized power for the channel. The licensee may also, jointly with other licensees, transmit utilizing bandwidth in excess of its authorized bandwidth, provided that digital modulation is employed, all power spectral density requirements set forth in this part are met and the out-of-band emissions restrictions set forth in § 27.53 are met at the edges of the channels employed.

§ 27.1221 Interference protection.

(a) Interference protection will be afforded to BRS and EBS on a station-by-station basis based on the heights of the stations in the LBS and UBS and also on height benchmarking, although the heights of antennas utilized are not restricted.

(b) *Height benchmarking.* Height benchmarking is defined for pairs of base stations, one in each of two proximate geographic service areas (GSAs). The height benchmark, which is defined in meters (hb_m) for a particular base station relative to a base station in another GSA, is equal to the distance, in kilometers, from the base station along a radial to the nearest point on the GSA boundary of the other base station squared (D_{km}^2) and then divided by 17. That is, $hb_{(m)} = D_{km}^2/17$. A base station antenna will be considered to be within its applicable height benchmark relative to another base station if the height in meters of its centerline of radiation above average elevation (HAAE) calculated along the straight line between the two base stations in accordance with § 24.53(b) and (c) of this chapter does not exceed the height benchmark (hb_m). A base station antenna will be considered to exceed its applicable height benchmark relative to another base station if the HAAE of its centerline of radiation calculated along the straight line between the two base stations in accordance with § 24.53(b) and (c) of this chapter exceeds the height benchmark (hb_m).

(c) *Protection for receiving antennas not exceeding the height benchmark.* Absent agreement between the two licensees to the contrary, if a transmitting antenna of one BRS/EBS licensee's base station exceeds its applicable height benchmark and such licensee is notified by another BRS/EBS licensee that it is generating an undesired signal level in excess of −107 dBm/5.5 megahertz at the receiver of a co-channel base station that is within its applicable height benchmark, then the licensee of the base station that exceeds its applicable height benchmark shall either limit the undesired signal at the receiver of the protected base station to −107dBm/5.5 megahertz or less or reduce the height of its transmission antenna to no more than the height benchmark. If the interfering base station has been modified to increase the EIRP transmitted in the direction of the protected base station, it shall be deemed to have commenced operations on the date of such modification. Such corrective action shall be completed no later than:

(i) 24 hours after receiving such notification, if the base station that exceeds its height benchmark commenced operations after the station that is within its applicable height benchmark; or

(ii) 90 days after receiving such notification, if the base station that exceeds its height commenced operations prior to the station that is within its applicable height benchmark. For purposes of this section, if the interfering base station has been modified to increase the EIRP transmitted in the direction of the victim base station, it shall be deemed to have commenced operations on the date of such modification.

(d) *No Protection from a transmitting antenna not exceeding the height benchmark.* The licensee of a base station transmitting antenna less than or equal to its applicable height benchmark shall not be required pursuant to paragraph (c) of this section to limit that antennas undesired signal level to −107dBm/5.5 megahertz or less at the receiver of any co-channel base station.

(e) *No protection for a receiving-antenna exceeding the height benchmark.* The licensee of a base station receive antenna that exceeds its applicable height benchmark shall not be entitled pursuant to paragraph (c) of this section to insist that any co-channel base station limit its undesired signal level to −107dBm/5.5 megahertz or less at the receiver.

(f) *Information exchange.* A BRS/EBS licensee shall provide the geographic coordinates, the height above ground level of the center of radiation for each transmit and receive antenna, and the date transmissions commenced for each of the base stations in its GSA within 30 days of receipt of a request from a co-channel BRS/EBS licensee with an operational base station located in a proximate GSA. Information shared pursuant to this section shall not be disclosed to other parties except as required to ensure compliance with this section.

[69 FR 72034, Dec. 10, 2004, as amended at 70 FR 1190, Jan. 6, 2005; 71 FR 35191, June 19, 2006; 73 FR 26041, May 8, 2008]

§ 27.1222 Operations in the 2568–2572 and 2614–2618 bands.

All operations in the 2568–2572 and 2614–2618 MHz bands shall be secondary to adjacent-channel operations. Stations operating in the 2568–2572 and 2614–2618 MHz must not cause interference to licensees in operation in the LBS, MBS, and UBS and must accept any interference from any station operating in the LBS, MBS, and UBS in compliance with the rules established in this subpart. Stations operating in the 2568–2572 and 2614–2618 bands may cause interference to stations in operation in the LBS, MBS, and UBS if the affected licensees consent to such interference.

POLICIES GOVERNING THE TRANSITION OF THE 2500–2690 MHZ BAND FOR BRS AND EBS

§ 27.1230 Conversion of the 2500–2690 MHz band.

BRS and EBS licensees in the 2500–2690 MHz band on the pre-transition A-I Channels will be transitioned from the frequencies assigned to them under § 27.5(i)(1) to the frequencies assigned to them under § 27.5(i)(2). The transition, which will be undertaken by one or more proponent(s), will occur in the following five phases: initiating the transition process (see § 27.1231), planning the transition (see § 27.1232), reimbursing transition costs (see §§ 27.1233 and 27.1237–1239), terminating existing operations in transitioned markets that do not comport with § 27.5(i)(2) (see § 27.1234), and filing the post-transition notification (see § 27.1235). Licensees may also self-transition (see § 27.1236).

[71 FR 35191, June 19, 2006]

§ 27.1231 Initiating the transition.

(a) *Transition areas.* Unless paragraph (b) of this section applies, the transition will occur by Basic Trading Area (BTA). BTAs are based on the Rand McNally 1992 Commercial Atlas & Marketing Guide, 123rd Edition, at pages 38–39, that identifies 487 BTAs based on the 50 States; it also includes the following additional BTA-like areas: American Samoa; Guam; Northern Mariana Islands; Mayaguez/Aguadilla-Ponce, Puerto Rico; San Juan, Puerto Rico; and the United States Virgin Islands, for a total of 493 BTAs. The Mayaguez/Aguadilla-Ponce BTA-like area consists of the following municipios: Adjuntas, Aguada, Aguadilla, Anasco, Arroyo, Cabo Rojo, Coamo, Guanica, Guayama, Guayanilla, Hormigueros, Isabela, Jayuya, Juana Diaz, Lajas, Las Marias, Maricao, Maunabo, Mayaguez, Moca, Patillas, Penuelas, Ponce, Quebradillas, Rincon, Sabana Grande, Salinas, San German, Santa Isabel, Villalba, and Yauco. The San Juan BTA-like area consists of all other municipios in Puerto Rico. The BTA associated with the Gulf of Mexico will not be transitioned.

(b) *Overlapping GSAs.* When a Geographic Service Area (GSA) overlaps two or more BTAs:

(1) The proponents of the adjacent BTAs may agree on how to transition a GSA that overlaps their respective BTAs.

(2) If an agreement has not been reached between or among the proponents of the adjacent BTAs:

(i) Each proponent must transition all of the facilities associated with the GSA that are inside the GSA and inside