§ 25.219

geostationary satellite orbit as it appears at the particular earth station location:

15–10log ₁₀ (N)–25log ₁₀ θ	dBW/4 kHz	For	$1.5^{\circ} \le \theta \le 7^{\circ}$
-6-10log ₁₀ (N)	dBW/4 kHz	For	$7^{\circ} < \theta \leq 9.2^{\circ}$
$18-10\log_{10}(N)-25\log_{10}\theta$	dBW/4 kHz	For	$9.2^{\circ} < \theta \le 48^{\circ}$
-24-10log ₁₀ (N)	dBW/4 kHz	For	$48^{\circ} < \theta \le 180^{\circ}$

where θ and the plane of the geostationary satellite orbit are defined in paragraph (c)(1) of this section, and N is defined below. For the purposes of this section, the peak EIRP of an individual sidelobe may not exceed the envelope defined above for θ between 1.5° and 7.0°. For θ greater than 7.0°, the envelope may be exceeded by no more than 10% of the sidelobes, provided no individual sidelobe exceeds the envelope given above by more than 3 dB. For digital SCPC using frequency division multiple access (FDMA) or time divi

sion multiple access (TDMA) technique, N is equal to one. For digital SCPC using code division multiple access (CDMA) technique, N is the maximum number of co-frequency simultaneously transmitting earth stations in the same satellite receiving beam.

(2) In all other directions, or in the plane of the horizon including any outof-plane potential terrestrial interference paths:

18–10log ₁₀ (N)–25log ₁₀ θ	dBW/4 kHz	For	$3^{\circ} \leq \theta \leq 48^{\circ}$
-24-10log ₁₀ (N)	dBW/4 kHz	For	$48^{\circ} < \theta \le 85^{\circ}$

where θ is defined in paragraph (c)(2) of this section and N is defined in paragraph (h)(1) of this section. For the purposes of this section, the envelope may be exceeded by no more than 10% of the sidelobes provided no individual sidelobe exceeds the envelope given above by more than 6 dB. The region of the main reflector spillover energy is to be interpreted as a single lobe and shall not exceed the envelope by more than 6 dB.

[73 FR 70902, Nov. 24, 2008]

EFFECTIVE DATE NOTE: At 74 FR 9962, Mar. 9, 2009, §25.218, which contains information collection and recordkeeping requirements, became effective with approval by the Office of Management and Budget for a period of three years.

§ 25.219 [Reserved]

§ 25.220 Non-conforming transmit/receive earth station operations.

- (a)(1) This section applies to earth station applications, other than ESV applications and 17/24 GHz BSS feeder link applications, in which the proposed earth station operations do not fall within the applicable off-axis EIRP envelope specified in Section 25.218 of this chapter.
- (2) The requirements for petitions to deny applications filed pursuant to this section are set forth in §25.154.

- (b) If an antenna proposed for use by the applicant does not comply with the antenna performance standards contained in §25.209(a) and (b), the applicant must provide, as an exhibit to its FCC Form 312 application, the antenna gain patterns specified in §25.132(b).
- (c) [Reserved]
- (1) The applicant must provide in its Form 312, Schedule B, the power and power density levels that result by reducing the values stated in §§25.134, 25.211, or 25.212, whichever is applicable, by the number of decibels that the non-compliant antenna fails to meet the antenna performance standard of §25.209(a) and (b), or
- (2) The applicant will not be permitted to transmit to any satellite unless the applicant has provided the certifications listed in paragraph (e)(1) of this section from the operator of that satellite(s).
- (3) The applicant will not receive protection from adjacent satellite interference from any satellite unless the applicant has provided the certifications listed in paragraph (d)(1) of this section from the operator of that satellite(s) from which it plans to receive.
- (d)(1) The applicant must submit the certifications listed in paragraphs

- (d)(1)(i) through (d)(1)(iv) of this section. The applicant will be authorized to transmit only to the satellite systems included in the coordination agreements referred to in the certification required by paragraph (d)(1)(ii) of this section. The applicant will be granted protection from receiving interference only with respect to the satellite systems included in the coordination agreements referred to in the certification required by paragraph (d)(1)(ii) of this section, and only to the extent that protection from receiving interference is afforded by those coordination agreements.
- (i) A statement from the satellite operator acknowledging that the proposed operation of the subject non-conforming earth station with its satellite(s) has the potential to receive interference from adjacent satellite networks that may be unacceptable.
- (ii) A statement from the satellite operator that it has coordinated the operation of the subject non-conforming earth station accessing its satitsellite(s). including required downlink power density based on the information contained in the application, with all adjacent satellite networks within 6° of orbital separation from its satellite(s), and the operations will operate in conformance with existing coordination agreement for its satellite(s) with other satellite systems, except as set forth in paragraph (d)(4) of this section.
- (iii) A statement from the satellite operator that it will include the subject non-conforming earth station operations in all future satellite network coordinations, and
- (iv) A statement from the earth station applicant certifying that it will comply with all coordination agreements reached by the satellite operator(s).
- (2) A license granted pursuant to paragraph (d)(1) of this section will include, as a condition on that license, that if a good faith agreement cannot be reached between the satellite operator and the operator of a future 2° compliant satellite, the earth station operator shall accept the power density levels that would accommodate the 2° compliant satellite.

- (3) In the event that a coordination agreement discussed in paragraph (d)(1)(ii) of this section is reached, but that coordination agreement does not address protection from interference for the earth station, that earth station will be protected from interference to the same extent that an earth station that meets the requirements of §25.209 of this title would be protected from interference.
- Notwithstanding paragraph (d)(1)(ii) of this section, a party applying for an earth station license pursuant to this section will not be required to certify that its target satellite operator has reached a coordination agreement with another satellite operator whose satellite is within 6° of orbital separation from its satellite in cases where the off-axis EIRP density level of the proposed earth station operations will be less than or equal to the levels specified by the applicable offaxis EIRP envelope set forth in §25.218 of this chapter in the direction of the part of the geostationary orbit arc within 1° of the nominal orbit location of the adjacent satellite.
 - (e)-(f) [Reserved]
- (g) Applicants filing applications for earth stations pursuant to this section must provide the following information for the Commission's public notice:
- (1) Detailed description of the service to be provided, including frequency bands and satellites to be used. The applicant must identify either the specific satellites with which it plans to operate, or the eastern and western boundaries of the geostationary satellite orbit arc it plans to coordinate.
- (2) The diameter or equivalent diameter of the antenna.
- (3) Proposed power and power density levels.
- (4) Identification of any rule or rules for which a waiver is requested.

[70 FR 32256, June 2, 2005, as amended at 72 FR 50030, Aug. 29, 2007; 73 FR 70902, Nov. 24, 2008]

EFFECTIVE DATE NOTE: At 74 FR 9962, Mar. 9, 2009, §25.220 paragraphs (a) and (d), which contain information collection and record-keeping requirements, became effective with approval by the Office of Management and Budget for a period of three years.