

percent of time that audio signal quality meets an established threshold. If an analog voice system is replaced with a digital voice system, only the resulting frequency response, harmonic distortion, signal-to-noise ratio and its reliability will be considered in determining comparable reliability.

(3) *Operating costs.* Operating costs are the cost to operate and maintain the FS system. FSS licensees must compensate FS licensees for any increased recurring costs associated with the replacement facilities (e.g., additional rental payments, increased utility fees) for five years after relocation. FSS licensees may satisfy this obligation by making a lump-sum payment based on present value using current interest rates. Additionally, the maintenance costs to the FS licensee must be equivalent to the 18 GHz system in order for the replacement system to be considered comparable.

§ 101.91 Involuntary relocation procedures.

(a) If no agreement is reached during the negotiations period, an FSS licensee may initiate relocation procedures under the Commission's rules. FSS licensees are obligated to pay to relocate only the specific microwave links from which their systems may receive interference. Under these procedures, the FS licensee is required to relocate, provided that the FSS licensee:

(1) Guarantees payment of relocation costs, including all engineering, equipment, site and FCC fees, as well as any legitimate and prudent transaction expenses incurred by the FS licensee that are directly attributable to the relocation, subject to a cap of two percent of the hard costs involved. Hard costs are defined as the actual costs associated with providing a replacement system, such as equipment and engineering expenses. FSS licensees are not required to pay FS licensees for internal resources devoted to the relocation process. FSS licensees are not required to pay for transaction costs incurred by FS licensees during the negotiations once the negotiation is initiated, or for fees that cannot be legitimately tied to the provision of comparable facilities;

(2) Completes all activities necessary for implementing the replacement fa-

ilities, including engineering and cost analysis of the relocation procedure and, if radio facilities are used, identifying and obtaining, on the incumbents' behalf, new microwave frequencies and frequency coordination; and

(3) Builds the replacement system and tests it for comparability with the existing 18 GHz system.

(b) *Comparable facilities.* The replacement system provided to an incumbent during a relocation must be at least equivalent to the existing FS system with respect to the following three factors:

(1) *Throughput.* Communications throughput is the amount of information transferred within a system in a given amount of time. If analog facilities are being replaced with analog, the FSS licensee is required to provide the FS licensee with an equivalent number of 4 kHz voice channels. If digital facilities are being replaced with digital, the FSS licensee must provide the FS licensee with equivalent data loading bits per second (bps). FSS licensees must provide FS licensees with enough throughput to satisfy the FS licensee's system use at the time of relocation, not match the total capacity of the FS system.

(2) *Reliability.* System reliability is the degree to which information is transferred accurately within a system. FSS licensees must provide FS licensees with reliability equal to the overall reliability of their system. For digital data systems, reliability is measured by the percent of time the bit error rate (BER) exceeds a desired value, and for analog or digital voice transmissions, it is measured by the percent of time that audio signal quality meets an established threshold. If an analog voice system is replaced with a digital voice system, only the resulting frequency response, harmonic distortion, signal-to-noise ratio and its reliability will be considered in determining comparable reliability.

(3) *Operating costs.* Operating costs are the cost to operate and maintain the FS system. FSS licensees must compensate FS licensees for any increased recurring costs associated with

the replacement facilities (e.g., additional rental payments, increased utility fees) for five years after relocation. FSS licensees may satisfy this obligation by making a lump-sum payment based on present value using current interest rates. Additionally, the maintenance costs to the FS licensee must be equivalent to the 18 GHz system in order for the replacement system to be considered comparable.

(c) The FS licensee is not required to relocate until the alternative facilities are available to it for a reasonable time to make adjustments, determine comparability, and ensure a seamless handoff. The FS licensee may take up to 12 months to make such adjustments and perform such testing.

(d) If the FS licensee demonstrates to the Commission that the new facilities are not comparable to the former facilities, the Commission may require the FSS licensee to further modify or replace the FS licensee's equipment.

[65 FR 54173, Sept. 7, 2000, as amended at 66 FR 63516, Dec. 7, 2001]

§ 101.95 Sunset provisions for licensees in the 18.30–19.30 GHz band.

(a) FSS licensees are not required to pay relocation costs after the relocation rules sunset (see §§ 74.502(c), 74.602(g), and 78.18(a)(4) of this chapter, and 101.147 (a) and (r)). Once the relocation rules sunset, an FSS licensee may require the incumbent to cease operations, provided that the FSS licensee intends to turn on a system within interference range of the incumbent, as determined by TIA Bulletin 10-F or any standard successor. FSS licensee notification to the affected FS licensee must be in writing and must provide the incumbent with no less than six months to vacate the spectrum. After the six-month notice period has expired, the FS licensee must turn its license back into the Commission, unless the parties have entered into an agreement which allows the FS licensee to continue to operate on a mutually agreed upon basis.

(b) If the parties cannot agree on a schedule or an alternative arrangement, requests for extension will be accepted and reviewed on a case-by-case basis. The Commission will grant such

extensions only if the incumbent can demonstrate that:

(1) It cannot relocate within the six-month period (e.g., because no alternative spectrum or other reasonable option is available); and

(2) The public interest would be harmed if the incumbent is forced to terminate operations (e.g., if public safety communications services would be disrupted).

§ 101.97 Future licensing in the 18.30–19.30 GHz band.

(a) All major modifications and extensions to existing FS systems in the 18.3–18.58 band after November 19, 2002, or in the 18.58–19.30 band after June 8, 2000 (with the exception of certain low power operations authorized under § 101.147(r)(10)) will be authorized on a secondary basis to FSS systems. All other modifications will render the modified FS license secondary to FSS operations, unless the incumbent affirmatively justifies primary status and the incumbent FS licensee establishes that the modification would not add to the relocation costs for FSS licensees. Incumbent FS licensees will maintain primary status for the following technical changes:

- (1) Decreases in power;
- (2) Minor changes (increases or decreases) in antenna height;
- (3) Minor location changes (up to two seconds);
- (4) Any data correction which does not involve a change in the location of an existing facility;
- (5) Reductions in authorized bandwidth;
- (6) Minor changes (increases or decreases) in structure height;
- (7) Changes (increases or decreases) in ground elevation that do not affect centerline height;
- (8) Minor equipment changes.
- (9) Changes in ownership or control.

(b) The provisions of § 101.83 are applicable, notwithstanding any other provisions of this section.

[65 FR 54173, Sept. 7, 2000, as amended at 66 FR 63516, Dec. 7, 2001; 68 FR 19698, Apr. 8, 2003]

Subpart C—Technical Standards