its discretion, require greater attenuation than specified in this section.

§ 90.693 Grandfathering provisions for incumbent licensees.

- (a) General provisions. These provisions apply to "incumbent licensees," all 800 MHz licensees authorized in the 809-821/854-866 MHz band who obtained licenses or filed applications on or before December 15, 1995.
- (b) Spectrum blocks A through V. An incumbent licensee's service area shall be defined by its originally licensed 40 $dB\mu V/m$ field strength contour and its interference contour shall be defined as its originally-licensed 22 dBµV/m field strength contour. The "originally-licensed" contour shall be calculated using the maximum ERP and the actual height of the antenna above average terrain (HAAT) along each radial. Incumbent licensees are permitted to add, remove or modify transmitter sites within their original 22 dBµV/m field strength contour without prior notification to the Commission so long as their original 22 $dB\mu V/m$ field strength contour is not expanded. Incumbent licensee protection extends only to its 40 dBµV/m signal strength contour. Pursuant to the minor modification notification procedures set forth in 1.947(b), the incumbent licensee must notify the Commission within 30 days of any change in technical parameters for stations that are authorized under a waiver or that are authorized 90.621(b)(4). under 90.621(b)(5).
- (c) Special provisions for spectrum blocks F1 through V. Incumbent licensees that have received the consent of all affected parties or a certified frequency coordinator to utilize an 18 dBuV/m signal strength interference contour shall have their service area defined by their originally-licensed 36 dBμV/m field strength contour and their interference contour shall be defined as their originally-licensed 18 $dB\mu V/m$ field strength contour. The "originally-licensed" contour shall be calculated using the maximum ERP and the actual HAAT along each radial. Incumbent licensees seeking to utilize an 18 dB μ V/m signal strength interference contour shall first seek to obtain the consent of affected co-chan-

nel incumbents. When the consent of a co-channel licensee is withheld, an incumbent licensee may submit to any certified frequency coordinator an engineering study showing that interference will not occur, together with proof that the incumbent licensee has sought consent. Incumbent licensees are permitted to add, remove or modify transmitter sites within their original 18 $dB\mu V/m$ field strength contour without prior notification to the Commission so long as their original 18 $dB\mu V/$ m field strength contour is not expanded. Incumbent licensee protection extends only to its 36 dBµV/m signal strength contour. Pursuant to the minor modification notification procedures set forth in 1.947(b), the incumbent licensee must notify the Commission within 30 days of any change in technical parameters for stations that are authorized under a waiver of 90.621(b)(4), or that are authorized under 90.621(b)(5).

- (d) Consolidated license—(1) Spectrum blocks A through V. Incumbent licensees operating at multiple sites may, after grant of EA licenses has been completed, exchange multiple site licenses for a single license, authorizing operations throughout the contiguous and overlapping 40 dBµV/m field strength contours of the multiple sites. Incumbents exercising this license exchange option must submit specific information on Form 601 for each of their external base sites after the close of the 800 MHz SMR auction. The incumbent's geographic license area is defined by the contiguous and overlapping 22 $dB\mu V/m$ contours of its constructed and operational external base stations and interior sites that are constructed within the construction period applicable to the incumbent. Once the geographic license is issued, facilities that are added within an incumbent's existing footprint and that are not subject to prior approval by the Commission will not be subject to construction requirements.
- (2) Special Provisions for Spectrum Blocks F1 through V. Incumbent licensees that have received the consent of all affected parties or a certified frequency coordinator to utilize an 18 dB μ V/m signal strength interference contour operating at multiple sites

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may, after grant of EA licenses has been completed, exchange multiple site licenses for a single license. This single site license will authorize operations throughout the contiguous and overlapping 36 dBµV/m field strength contours of the multiple sites. Incumbents exercising this license exchange option must submit specific information on Form 601 for each of their external base sites after the close of the 800 SMR auction. The incumbent's geographic license area is defined by the contiguous and overlapping 18 dBµV/m contours of its constructed and operational external base stations and interior sites that are constructed within the construction period applicable to the incumbent. Once the geographic license is issued, facilities that are added within an incumbent's existing footprint and that are not subject to prior approval by the Commission will not be subject to construction requirements.

[64 FR 71055, Dec. 20, 1999, as amended at 69 FR 67852, Nov. 22, 2004; 70 FR 6761, Feb. 8, 2005; 70 FR 61062, Oct. 20, 2005]

§ 90.699 Transition of the upper 200 channels in the 800 MHz band to EA licensing.

In order to facilitate provision of service throughout an EA, an EA licensee may relocate incumbent licensees in its EA by providing "comparable facilities" on other frequencies in the 800 MHz band. Such relocation is subject to the following provisions:

- (a)-(c) [Reserved]
- (d) Comparable facilities. The replacement system provided to an incumbent during an involuntary relocation must be at least equivalent to the existing 800 MHz system with respect to the following four factors:
- (1) System. System is defined functionally from the end user's point of view (i.e., a system is comprised of base station facilities that operate on an integrated basis to provide service to a common end user, and all mobile units associated with those base stations). A system may include multiple-licensed facilities that share a common switch or are otherwise operated as a unitary system, provided that the end user has the ability to access all such facilities. A system may cover more than one EA

if its existing geographic coverage extends beyond the EA borders.

- (2) Capacity. To meet the comparable facilities requirement, an EA licensee must relocate the incumbent to facilities that provide equivalent channel capacity. We define channel capacity as the same number of channels with the same bandwidth that is currently available to the end user. For example, if an incumbent's system consists of five 50 kHz (two 25 kHz paired frequencies) channels, the replacement system must also have five 50 kHz channels. If a different channel configuration is used, it must have the same overall capacity as the original configuration. Comparable channel capacity requires equivalent signaling capability, baud rate, and access time. In addition, the geographic coverage of the channels must be coextensive with that of the original system.
- (3) Quality of service. Comparable facilities must provide the same quality of service as the facilities being replaced. Quality of service is defined to mean that the end user enjoys the same level of interference protection on the new system as on the old system. In addition, where voice service is provided, the voice quality on the new system must be equal to the current system. Finally, reliability of service is considered to be integral to defining quality of service. Reliability is the degree to which information is transferred accurately within the system. Reliability is a function of equipment failures (e.g., transmitters, feed lines, antennas, receivers, battery back-up power, etc.) and the availability of the frequency channel due to propagation characteristics (e.g., frequency, terrain, atmospheric conditions, radio-frequency noise, etc.) For digital data systems, this will be measured by the percent of time the bit error rate exceeds the desired value. For analog or digital voice transmissions, this will be measured by the percent of time that audio signal quality meets an established threshold. If analog voice system is replaced with a digital voice system the resulting frequency response, harmonic distortion, signal-to-noise ratio, and reliability will be considered.
- (4) Operating costs. Operating costs are those costs that affect the delivery