

the instruction manual. We note that the Commission's Laboratory sometimes requires manufacturers to provide information in the instruction manual advising users that equipment must be operated at a minimum distance from the body to comply with the RF safety guidelines in the rules. We will allow such statements to be provided in the same manner as the part 15 warning statements. If the instruction manual is provided in an alternative format, manufacturers can provide the RF safety statements information in hard copy form if they choose, but we will not require them to do so.

### Emission Limits Above 2 GHz

37. While the Commission did not propose any changes to the general radiated emission limits in part 15 of the rules or to the radiated emission limits that apply outside the Industrial, Scientific and Medical (ISM) bands under part 18 of the rules, several parties filed comments recommending changes to these limits. ITI states that it may be appropriate to increase the part 15 limits in steps above 6 GHz, 10.5 GHz and 15 GHz, but did not recommend specific limits. Linear believes that the current part 15 limit of 500  $\mu\text{V}/\text{m}$  at 3 meters above 960 MHz should increase by 3 dB for every doubling of frequency. Sirius Satellite Radio, Inc. (Sirius) requests that we reduce the current part 15 and 18 limits to 8.6  $\mu\text{V}/\text{m}$  at 3 meters in the satellite digital audio radio service (SDARS) band. XM Radio, Inc. (XM) requests that we establish a limit in the SDARS band of 18  $\mu\text{V}/\text{m}$  at 3 meters for part 15, 18 and 95 devices operating exclusively in vehicles, and a limit of 8.6  $\mu\text{V}/\text{m}$  at 3 meters for such devices operating in all other environments. Intersil and Motorola oppose Sirius' and XM's recommended emission limits in the SDARS bands, disputing the methodology used to arrive at the recommended limits. Because the Notice did not include proposals for any changes to the general radiated emission limits for equipment operating under parts 15, 18 or other parts of the rules, we find that the requests made by ITI and Linear to raise the emission limits above 960 MHz are outside the scope of this proceeding. Likewise, we find that the requests by XM and Sirius for tighter emission limits in the SDARS band are also outside the scope of this proceeding.

### Additional Changes to Part 15

38. In the *NPRM*, the Commission proposed additional changes to part 15 of the rules to modify rule sections that needed to be updated to reflect the

availability of more recent industry documents, or that needed other minor revisions. The following is a summary of the proposed changes:

- *Section 15.31 Measurement standards*: remove references to measurement procedures that are no longer used, correct the Commission's mailing address, update the reference to reflect the new ANSI C63.4–2001 measurement procedure and clarify the type of antenna used for radiated measurements below 30 MHz.
- *Section 15.118 Cable ready consumer electronics equipment*: correct the Commission's mailing address.
- *Section 15.120 Program blocking technology requirements for television receivers*: correct the Commission's mailing address.
- *Section 15.255 Operation in the band 59.0–64.0 GHz*: correct the wording in paragraph (b)(5) from "emission limits" to "emission levels".

39. CEA, IBM, Motorola and TIA support these proposals to update and correct the rules. ITI and Cisco support referencing the C63.4–2001 measurement procedure in place of the C63.4–1992 measurement procedure currently referenced in the rules. They also request that we exclude the use of section 8.2.2 of C63.4, which permits measurements of radiated emissions below 30 MHz to be made with a rod antenna, because the Commission and Telecommunication Certification Bodies only accept measurements made with a calibrated loop antenna. Retlif and ACIL oppose the use of the C63.4–2001 measurement procedure, stating that there will be no consistent application of the new standard for many years because there were wide differences in interpretation of the standard within the committee that approved it. IBM suggests that we permit use of the CISPR 22 measurement procedure below 1 GHz as an alternative to the C63.4 procedure to eliminate the potential for dual testing of products worldwide. IBM also suggests that we adopt the CISPR 22 emission limits as alternatives to our AC power line and radiated emission limits for intentional radiators in §§ 15.207 and 15.209 of the rules. IBM states this could eliminate multiple testing of computers that contain transmitters because our rules permit computers, but not transmitters, to be tested for compliance with the CISPR 22 limits, so multiple tests may be required for one device.

40. We are adopting the changes we proposed to update and correct the rules, including referencing the C63.4–2001 measurement procedure. C63.4–2001 provides clarifications to the measurement procedure and

configuration of the equipment under test, but does not contain any significant changes from C63.4–1992 that will affect measurement results. As proposed, we will exclude the use of section 8.2.2 of C63.4–2001 concerning rod antennas because we have found that calibrated loop antennas provide more accurate and repeatable field strength measurements below 30 MHz. Referencing the new procedure is necessary because the C63.4–1992 procedure referenced in our rules is no longer available from the Institute of Electrical and Electronics Engineers (IEEE) Standards Department. We do not accept the recommendation of Retlif and ACIL not to reference C63.4–2001 in the rules. C63.4–2001 has gone through the ANSI review process and has been adopted as an ANSI standard. We decline to specify the use of the CISPR 22 measurement procedure as an alternative to the C63.4 procedure as requested by IBM. We support the concept of a single compliance test for equipment. In this case, though, there are differences between the two procedures and it has not been shown that the procedures produce equivalent measurement results. For example, the CISPR 22 procedure specifies the use of ferrite clamps on some cables on the equipment under test, while the C63.4 procedure does not. We will consider the possibility of recognizing the CISPR 22 procedure as an alternative to the C63.4 procedure, as well as the possibility of accepting the CISPR 22 limits for intentional radiators, at a later time.

### Family Radio Service Equipment Measurements.

41. In the *NPRM*, the Commission proposed to require that carrier frequency tolerance measurements for Family Radio Service (FRS) transmitters be made over the temperature range of  $-20\text{ }^{\circ}\text{C}$  to  $+50\text{ }^{\circ}\text{C}$  rather than  $-30\text{ }^{\circ}\text{C}$  to  $+50\text{ }^{\circ}\text{C}$ . This proposal was intended to correct an inadvertent conflict between the rules and existing Commission measurement practices that arose when the Commission streamlined the equipment authorization procedures in 1998.

42. Cobra Electronics Corporation (Cobra) and Uniden America Corporation (Uniden) support the proposed change. Uniden states that measurements should be required only to  $-20\text{ }^{\circ}\text{C}$ , because years of experience with radios tested to this temperature show that no adverse consequences have been observed in the real world. Cobra states that millions of FRS units have been produced that were tested to  $-20\text{ }^{\circ}\text{C}$  with no reported difficulties