

majority of equipment subject to DoC is tested as a complete unit rather than assembled from tested components. Therefore, this action will allow labels to be further streamlined on the majority of devices subject to this procedure. Because this change is deregulatory in nature and requires no new information to be added to labels, no transition period is necessary. Responsible parties may continue to use labels that were designed to meet the old requirements as long as they wish and may change to the simplified labels at their convenience.

26. We decline to limit the appearance of the statement required by § 15.19(a)(3) to the instruction manual, as requested by IBM. This statement advises users that operation of the equipment is subject to the conditions that it not cause harmful interference and that it must accept any interference received, including interference that may cause undesired operation. We believe that many users may be unaware of this requirement for part 15 devices, so this statement provides useful information to users. In addition, § 15.19(a)(5) already contains a provision that permits the label to be placed in the instruction manual in cases where a device is so small that it is not practicable to place the statement on the device. We decline to change the rules as requested by ITI and IBM to specify that the trade name and model number do not have to appear on the DoC label if they appear elsewhere on the equipment, because we already permit placement of this information elsewhere on the equipment when necessary. Therefore, there is no need for the recommended rule change. Likewise, labeling for a device may be placed inside a battery compartment when necessary, so there is no need for a rule change.

27. We decline to permit electronic labeling of equipment subject to DoC or for any other equipment except software defined radios. The rules currently permit electronic labeling for software defined radios because there is sometimes a need for a third party to change the identification number of a radio in the field when changes are made to the software that affect the device's operating frequency, modulation type or maximum output power. This permits the identification number to be changed without physical re-labeling of a radio. None of the comments in this proceeding have shown that there is a similar need for us to allow this capability in equipment subject to DoC or in any other equipment besides software defined radios.

### **Test Procedure for Unlicensed PCS Equipment**

28. In the *NPRM*, the Commission proposed to incorporate into our rules by reference American National Standards Institute (ANSI) C63.17–1998 as the procedure it will use for testing unlicensed Personal Communication Service (PCS) equipment. This procedure was developed by the ANSI C63 Committee specifically for testing unlicensed PCS equipment for compliance with the requirements in part 15 of the rules.

29. CEA, Cisco and Motorola support the use of the C63.17–1998 procedure for testing unlicensed PCS equipment. CEA and Motorola state that this procedure will help ensure that equipment complies with the Commission's rules. Cisco states that it was developed by qualified industry experts. We find that ANSI C63.17–1998 provides detailed guidance that will assist manufacturers in measuring unlicensed PCS devices to ensure that they comply with the requirements in our rules. Accordingly, we are incorporating this procedure into the rules by reference as the procedure we will use for testing unlicensed PCS equipment under part 15 of the rules.

### **Approval of Very Low-Powered Devices**

30. Part 15 currently requires all intentional radiators to be certified, regardless of how low an operating power they use. Certification requires the manufacturer to have the equipment tested for compliance, then file an application and wait for approval before the equipment can be marketed. In the *NPRM*, the Commission proposed to exempt intentional radiators operating below 490 kHz from certification if the maximum field strength emitted is more than 40 dB below the applicable part 15 limits. As an alternative, the Commission sought comment on whether such devices should be subject to verification rather than exempted from any form of equipment authorization. Verification simply requires the manufacturer to have the equipment tested and to retain certain information on file. No application filing is required for verification and the equipment may be sold as soon as it is found to comply. The Commission stated that the interference potential of such devices appears to be extremely low, and that requiring certification seems to be an unnecessary burden on manufacturers.

31. The comments support eliminating the certification requirement for very low-powered intentional radiators, arguing that it is

burdensome and unnecessary. AdvaMed, Cisco, Linear, Polhemus and Uniden argue that such low-powered devices have a low potential for interference. TRP and AdvaMed state that signals 40 dB below the part 15 limit are below the ambient noise level and are difficult to measure. TRP believes that devices operating below 490 kHz that are battery operated with a self-contained antenna of much less than a wavelength should be exempted from any kind of equipment authorization if all emissions are at least 40 dB below the limit. It also believes that devices that have emissions less than 40 dB below the limit and that connect to the AC power lines should be subject to verification, rather than exempted, because they have a somewhat higher potential for interference. TRP states that compliance by low-powered devices can be determined by mathematical calculation and that open field testing is not necessary. However, ITI believes that devices must be tested to show they are at least 40 dB below the limit. It states that once a device is tested, the additional burden imposed by verification is minor in nature. Wacom recommends that the upper frequency range of devices to be exempted should be 1705 kHz instead of 490 kHz, so that devices can use higher frequencies to avoid interference from computer monitors. TIA states that the 490 kHz cutoff is too restrictive, and believes that the Commission should also eliminate the certification requirement for 2.4 GHz Bluetooth transmitters operating with less than 1 mW of power because they must already go through a rigorous private sector certification process for industry acceptance.

32. We find that requiring certification for intentional radiators operating below 490 kHz that have all emissions at least 40 dB below the limit is an unnecessary burden on manufacturers because the interference potential of such equipment is extremely low. Instead, we will require such equipment to be authorized through the verification procedure, thus eliminating the need for manufacturers to file an application and wait for an approval before marketing their equipment. Under the verification procedure, manufacturers may show that all emissions are at least 40 dB below the limit through testing. We recognize, however, that because of the low signal levels involved, it may be difficult to even detect such emissions with conventional measurement equipment. As an alternative to actual measurements, we will allow