

treated as minor modifications, even if operation is interference-free or is frequency coordinated, unless operation at the higher power levels is justified. Such continuation would otherwise ignore the existing requirement in §§ 74.644 and 78.108(c) that power in excess of that specified be justified by an appropriate technical showing, and could lead to the continuation of unnecessarily excessive power levels, thus defeating the spectral efficiency intended by minimum path length requirements. We decline to classify the conversion from analog to analog/digital or digital operation as a minor modification. Such a change is and will remain classified as major under § 1.929. Further, while operation without interference is possible, and frequency coordination may demonstrate the ability of the system to operate without interference, neither would necessarily justify the continuation of higher power levels, or thus warrant the continuation. We therefore decline to accept such conditions as sufficient justification to warrant the continuation of higher power levels, and will continue to require an appropriate technical showing justifying the elevated power, as required by § 74.644. With respect to MRC's recommendation to require upgrade of old analog receivers to avert harmful interference from a system converting to multiplexed analog/digital operation, we decline to impose such an upgrade, as our rules do not contain minimum receiver performance requirements.

6. We decline to designate the 1990–2110 MHz and 2450–2483.5 MHz bands for use by Remote Pickup BAS operations. We also decline to phase out fixed operation in these bands, to prohibit new fixed path lengths shorter than 17 km in these bands, or to phase out existing short paths in these bands in five years. We recognize that it is possible that the removal of fixed paths could free up spectrum for mobile use in some areas. However, we find that such action would unnecessarily limit the flexibility of TV BAS to accommodate fixed paths, where such paths are feasible and desirable with respect to mobile use of the band. This is particularly true for short paths, whose reduced EIRP can accommodate them in a spectrally efficient way. Moreover, the forced relocation of existing fixed links would be a burden on licensees.

#### Transmitter Power

7. We find that the proposals to harmonize power limits among parts 74, 78, and 101, and to express those limits

as maximum EIRPs will provide consistency and promote greater efficiency in our rules. We have adopted our proposals as stated in the *Notice of Proposed Rule Making*, (NPRM) 66 FR 28686, May 24, 2001, and are specifying the following EIRP limits: (a) For aural BAS operations in the 944–952 MHz band, 40 dBW; (b) for fixed operations for TV BAS in the 1990–2110 MHz and 2450–2483.5 MHz bands, 45 dBW; and (c) for mobile operations for TV BAS in the 1990–2110 MHz and 2450–2483.5 MHz bands and CARS operations in the 1990–2110 MHz band, 35 dBW. We have also deleted output power limitations for fixed systems as it will permit flexibility in designing systems. However, we will maintain output power limitations in the rules for mobile systems. Maintaining these limits will reduce the potential for interference from mobile systems because they limit EIRP for omnidirectional mobile systems and reduce off-axis EIRP for directional mobile systems.

8. Comsearch asked that the part 101 EIRP limit for the 12,200–13,250 MHz band be amended from 50 dBW to conform to the parts 74 and 78 limit of 55 dBW. We generally agree. We believe that providing common technical standards for similar stations simplifies the manufacturing and licensing process. We note that, except for LTTS, fixed stations under part 101 have not been eligible for new licenses in the 12,700–13,200 MHz portion of the band since 1983. These stations were designed and have been operating for the last 19 years or more with the 50 dBW limit. Thus, we see no reason to modify that limit for these stations. We will increase the EIRP limit to 55 dBW for all FS stations in the 13,200–13,250 MHz portion of the band. Further, we note that the rules for common carriers in the LTTS specify that they are subject to the technical rules of parts 74 and 78 in certain frequency bands shared with BAS and CARS. Therefore, they also will be subject to the higher 55 dBW limit we are adopting for fixed stations. To avoid confusion in the rules, we will amend § 101.807 to clearly state that LTTS stations in certain bands shared with BAS and CARS should follow the power rules of parts 74 and 78.

9. We found that maintaining the same EIRP limits for digital and analog systems is appropriate because, although digital systems would normally require less EIRP to operate, lowering their maximum EIRP could render them more susceptible to interference from higher powered analog systems. Finally, regarding BAS station operations at 2483.5–2500 MHz, the new EIRP limits should not apply to

grandfathered systems. Accordingly, in the final rules, we will specify that only the 2450–2483.5 MHz band is available for BAS stations. We note, however, that this action in no way affects the continued rights of grandfathered BAS stations in the 2483.5–2500 MHz band, as described in footnote NG147 of the Table of Frequency Allocations.

#### Emission Masks

10. Emission masks serve to maximize spectrum efficiency by permitting reasonable and practical information transfer within a channel and at the same time limiting out-of-band emissions to minimize adjacent channel interference. Our rules contain a number of emission masks tailored to specific operations and channel sizes. For example, different emission masks are authorized under parts 74, 78, and 101. Although the same equipment is often certified and used by licensees in different services, our rules, in some cases, allow each service to use a different emission mask for the same type of emission (e.g., FM, AM, etc.) in the same frequency band. The Commission in the *NPRM* proposed to make the FM and digital modulation emission mask requirements for BAS consistent with the requirements for FS in part 101 and proposed to adopt standard measurement procedures to measure emissions. Additionally, the Commission proposed to grandfather existing equipment authorized pursuant to current emission masks.

11. Commenters did not address our proposals to standardize the emission masks between part 74 and part 101. Most comments addressed nuances of the rules, such as how they apply to composite systems. On the specific emission masks proposed, the comments received were supportive. We believe that maintaining the status quo in the 2 GHz band would harm the industry more than help it. By providing certainty to manufacturers and users regarding equipment, we believe that the industry will be able to move forward and begin making wide scale use of digital equipment to increase spectral efficiency and to ensure that equipment is available for broadcasters as they transition to DTV. Accordingly, we adopted the proposals to amend the part 74 aural and TV BAS emission masks to make them consistent with the emission masks of part 101. As stated in the *NPRM*, imposing a single set of standards across shared frequency bands will simplify the manufacturing and equipment authorization processes. Additionally, consistent rules will provide a level of certainty to licensees regarding the expected RF environment,