Furthermore, AirTouch continues, a site owner could allocate costs associated with compliance responsibilities across all tenants and control tenant access for maintenance purposes. According to AirTouch, imposing responsibilities on site owners is consistent with Commission precedent with respect to other environmental obligations, such as antenna tower marking and lighting. Holly Fournier and Mary Beth Freeman oppose these arguments, suggesting that each operator should be responsible for making sure that its site is in compliance.[60] They argue that many site owners may be unsuspecting landowners who do not have the capability to make sure the transmitter facilities on their property are in compliance.

63. With respect to evaluation at multiple-transmitter sites, AT&T and PCIA propose that we should establish a fixed distance at which compliance should be evaluated.[61] AT&T also suggests we similarly define a "site" as a limited radius around an antenna or group of antennas. PCIA suggests that we should consider defining applicants' or licensees' obligations through the use of a power- and frequency-dependent area delineation, which would provide predictability for carriers while meeting our goals and minimizing unnecessary burdens. AirTouch suggests defining "site" as "a location that houses the antenna(s) of all licensees on the same altitudinal plane and that is under the control of a single site owner."[62]

64. PCIA seeks clarification regarding the phrase in 47 CFR § 1.1307(b)(1) just prior to Table 1, which indicates that the phrase "total power of all channels" refers to the sum of the power of all co-located, simultaneously operating transmitters of the facility.[63] PCIA and carriers have interpreted this note to require adding together the transmit power of each individual channel for multi-channel base stations but not requiring aggregating the power of all transmitters operating at a site. PCIA seeks clarification that "facility," as used in the note, is intended to refer to the co-located transmitters owned and operated by a single carrier and not intended to include all other transmitters at an antenna farm or on a rooftop for exclusion purposes. Similarly, AirTouch offers a definition of the term "facility" as "a licensee's unique assembly of antennas, transmitters, support structures, screens, wiring, etc.," with a licensee having "total control and responsibility over content, construction, and management of the facility."[64]

65. PCIA also urges that we clarify our policies with regard to liability for non-compliant multiple transmitter sites.[65] PCIA notes that, since a carrier may have no control

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[60] Holly Fournier and Mary Beth Freeman Reply at 4.

[61] AT&T Petition at 2 and 6, PCIA Petition at 7.

[62] AirTouch Reply at 9.

[63] PCIA Petition at 8.

[64] AirTouch Reply at 10.

[65] PCIA Petition at 16-17.

over a site, the carrier may not be notified or consulted at the time a subsequent transmitter is added or an existing transmitter is modified. PCIA proposes that we determine that carriers have no obligations with respect to facilities added or modified after they have conducted their own routine assessments of the area, unless the carrier is notified of the change. Similarly, U S WEST argues that liability for non-compliance at multiple-transmitter sites should be borne only by those causing the non-compliance, and that our rules should be revised to assure a "grandfathered" status for existing stations if other stations become co-located.[66]

66. Decision. For the reasons set forth below, we are amending our rules to raise the responsibility threshold, above which licensees at multiple transmitter locations must share responsibility for addressing RF exposure non-compliance problems, from 1% to 5%. We believe that a 5% responsibility threshold will offer relief to relatively low-powered site occupants who do not contribute significantly to the non-compliance and, at the same time, provide for the appropriate allocation of responsibility among major site emitters. Similarly, we are raising the filing threshold that determines whether an applicant must file an EA if the applicant contributes to field levels at an area of non-compliance. We are raising the present threshold of 1% to 5%. Therefore, if an applicant's contribution to the area of non-compliance exceeds 5%, the applicant must file an EA. We are also modifying the language used in our rules somewhat to better explain what is required at multiple-user sites.

67. Our policy with respect to multiple transmitter sites was adopted several years ago and has essentially remained unchanged. The 1% responsibility and filing thresholds have not been seriously questioned until now. These new questions undoubtedly reflect the fact that we have now removed the categorical exclusions for a number of different transmitting facilities, and this has resulted in the necessity for evaluating many more multiple-transmitter situations than was the case previously. Many petitioners give valid reasons for modifying the 1% thresholds. First and foremost, we believe, is the issue of accuracy of determination of field contributions, either through measurements or calculations. BellSouth makes a good point when it notes the difficulties of making accurate determinations to the 1% level. We also see merit in the arguments that a threshold of 1% is too encompassing, particularly in light of the potential that an applicant or licensee could be required to undergo an unnecessary and expensive evaluation and that such a requirement could actually discourage co-location. However, we believe that changing the threshold to 10% goes too far in the other direction, and could lead to the creation of areas of non-compliance. It could also result in some transmitter operators escaping their responsibilities for compliance at multiple transmitter sites.

68. For example, consider the case of a multiple-transmitter site where most of the antennas are paging antennas operating at ERPs of 1000 W or greater. Often such sites involve numerous, densely packed antennas, especially in urban areas. At some points during the day, due to high traffic, most of the antennas may be transmitting almost simultaneously.

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[66] U S WEST Petition at 5-8.

If there is a compliance problem at such a site, many or most of the antennas may be contributing to the area of non-compliance but not necessarily at the 10% level. Calculations can be used to demonstrate that non-complying areas are more likely to be the result of the contributions of several of these antennas, rather than just one or two. For this reason, it is important not to establish an exclusion threshold that is too high. On the other hand, as noted before, upon reconsideration, we agree that a level of 1% is unreasonable considering the problems of measurement and prediction accuracy and also the potential for unnecessary impact on small contributors. We believe that a 5% threshold represents a reasonable and supportable compromise, and are amending 47 CFR § 1.1307(b)(3) accordingly .

69. We agree with Ameritech and AirTouch, and others, that further guidance is needed on how to address multiple transmitter situations. In general, we intend that our rules, along with the guidance given in a revised FCC bulletin on evaluating compliance, OET Bulletin 65, will be sufficiently clear and complete so that licensees can readily determine their compliance with our RF exposure requirements.[67] In adopting this *Second Memorandum Opinion and Order*, we are attempting to address those areas where parties have indicated that confusion may exist. We recognize, however, that additional questions are likely to arise over time, especially with regard to particular multiple-transmitter situations. We direct staff to work with the industry to address such questions that may arise, both through the revision of Bulletin 65 and in response to inquiries regarding specific situations.

70. The key trigger with respect to our RF exposure rules is the existence of an ***accessible*** area where RF field levels will exceed our MPE limits. As delineated in 47 CFR § 1.1307(b)(3) as amended by this *Second Memorandum Opinion and Order*, responsibility is to be shared among those transmitter facilities contributing above the 5% threshold at a non-complying area. Since such situations can arise according to a variety of criteria, including transmitter power, antenna height, frequency and associated RF exposure limit, location of fencing to restrict access, etc., we can see no easy way to define a "site" or to specify some arbitrary radius around antennas at which compliance must be evaluated. However, we believe that it will not be difficult for most applicants to determine areas which are accessible. Applicants should be able to calculate, based on frequency, power, and antenna configuration, the distance from their transmitting antenna where their signal produces field levels equal to, or greater than, 5% of the relevant RF exposure limit. Applicants are then responsible for evaluating compliance in any accessible areas within this distance from their transmitting antenna.

71. In evaluating compliance in accessible areas, applicants are expected to make a good-faith effort to consider RF emissions from other nearby transmitters. However, we do not believe it is realistic, practical, or necessary for applicants to consider extremely weak

[67] See later discussion in this *Order* of issues related to the OST Bulletin 65, "Evaluating Compliance with FCC-Specified Guidelines for Human Exposure to Radiofrequency Radiation", which was published in October, 1985. This bulletin is being revised to reflect the Commission's newly adopted RF guidelines and procedures. We expect it to be issued shortly after adoption and release of this *Order*.

signals that are not likely to present a significant risk for exposure in excess of our limits. Accordingly, applicants need only consider those RF emissions produced by nearby transmitting facilities that exceed 5% of their relevant RF exposure limit.[68] The percentages of the relevant RF exposure limits produced by each station are added, to determine whether the limits are (or would be) exceeded as a result of the RF emissions from the multiple transmitter facilities.[69] If the limits are exceeded, then the applicant and the other responsible parties must address the problem (or the applicant can file an EA).

72. With respect to in-building transmitters, Ameritech interprets our rules adopted in the *Report and Order* as indicating that these transmitters would be categorically excluded from routine evaluation. In general, this is a correct interpretation. In-building transmitters are normally low-powered devices intended only to provide service within the building, or a portion of the building. As such, most in-building transmitters do not represent a significant risk for causing exposures in excess of our guidelines, and, except for unlicensed PCS and millimeter-wave devices, they are categorically excluded from requirements for routine evaluation because of their low power. However, we emphasize that all FCC-regulated transmitters are expected to comply with our applicable guidelines, regardless of whether they are categorically excluded or not. We see no reason to alter our policy on in-building transmitters at the present time, and no specific proposals were made in the petitions to do so. However, we may revisit this issue at a later date if there is new evidence that certain categories of in-building transmitters could present an exposure problem.[70]

73. We appreciate the arguments raised by the petitioners who advocate that site owners (rather than individual licensees) be responsible for determining and ensuring compliance with our RF exposure requirements. However, in an earlier decision regarding the streamlining of our antenna structure clearance procedure, we determined that responsibilities pertaining to RF electromagnetic fields properly belonged with our licensees and applicants, rather than with site owners. We agree with the concerns raised by Holly Fournier and Mary Beth Freeman that many site owners may not have the capability or understanding to make sure that transmitter facilities on their property are in compliance. Finally, since the area in which a licensee is responsible for addressing non-compliance problems (i.e., the contour within which the station's power density exceeds 5% of the relevant RF exposure limit) can

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[68] We note that, if an area of non-compliance is found, it would be these other stations that would share in the responsibility for correcting the problem.

[69] For example, if a TV station produces a power density 50% of its limit, an FM station produces a power density 25% of its limit, and a second FM station produces a power density of 30% of its limit at a particular accessible area, then the RF emissions would cumulatively equal 105% of the composite limit, and the RF exposure limits would be exceeded.

[70] Our current rules provide somewhat different categorical exclusions in certain services for "rooftop" and "non-rooftop" antennas. *See* 47 CFR § 1.1307(b)(1). As discussed later under Miscellaneous Clarifications and Corrections, we are amending our categorical exclusion rules to replace the current "rooftop/non-rooftop" designation with one based on whether a transmitter is mounted on a building.

extend for several meters from the transmitting antenna itself, it is conceivable that the accessible areas where our RF exposure limits are exceeded may involve multiple site owners or transmitting antennas located at other sites, making it difficult for a single site owner to ensure compliance.[71]

74. Nevertheless, we recognize that a site owner has significant control over applicants' and licensees' abilities to comply with our RF exposure requirements. For example, a site owner can determine whether a licensee will be permitted to erect a fence to limit public access in areas where the uncontrolled RF exposure limits may be exceeded. For sites where there are multiple licensees, the site owner also may be able to encourage the licensees to cooperate to find a common solution to problems caused by multiple transmitters. In addition, site owners may be able to take steps that would allow co-location of transmitting facilities. We believe that such co-location is highly desirable -- it can reduce the number of locations at which the potential for RF exposure must be evaluated, and it can facilitate the ability of applicants to get through the state and local zoning approval processes. Accordingly, we urge site owners to allow applicants and licensees to take reasonable steps to comply with our RF exposure requirements and, where feasible, encourage co-location of transmitters and common solutions for controlling access to areas where our RF exposure limits might be exceeded.

75. In response to the questions posed by Ameritech, PCIA, and U S WEST regarding how the responsibility for compliance is to be shared at multiple transmitter sites, we do not intend to specify detailed instructions on how to allocate responsibility. One logical suggestion would be to assign compliance costs according to the percentage contributions at the non-complying area(s) for situations involving no change in transmitter facilities.[72] An alternative would be, as suggested by PCIA, to require an applicant for a new facility to resolve the problem. Section 1.1307(b)(3)(i) of our new rules states that it is the

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[71] Consider the example of a high-powered broadcast station on the rooftop of a building. On an apartment building across the street there is a rooftop sundeck with several high-powered, high duty-factor, transmitting antennas used for paging that are located on the same rooftop within a few meters of the sundeck. Assume that at several locations on the sundeck the MPE limits for the general population are exceeded due to emissions of both the paging and broadcast transmitters and that all emission levels exceed the 5% threshold for the respective emitters at the accessible non-complying locations on the sundeck. In such a case the responsibility for compliance should belong to not only the paging transmitters, but also to the broadcast station, which is located several meters away from the sundeck. In such a situation a requirement for responsibility that only included the paging transmitters on the same building as the sundeck would not include a major contributor, the broadcast station. Therefore, if our RF exposure rules were applied only to site owners, a primary contributor might totally escape responsibility for necessary corrective action to ensure compliance, leaving the burden for compliance with the paging licensees. A similar situation could occur on the rooftop of a building located nearby to a high-powered broadcast station, regardless of whether any additional transmitters were located on the building.

[72] For example, when an applicant files for renewal of license at a location that was previously subject to our old RF exposure guidelines.

responsibility of a new applicant to submit an EA if their transmitter will create a non-complying situation at a location previously in compliance. However, we recognize that some particular circumstances may dictate different solutions. Accordingly, we encourage our licensees and applicants to work in a cooperative manner to address these problems. We note that, at most broadcast antenna farms, cooperative agreements have been developed to ensure compliance with applicable RF exposure guidelines. We see no reason why such agreements also cannot be used at other antenna sites. In response to the concern raised by Ameritech, we encourage any applicant or licensee to notify the appropriate Commission licensing bureau if the operator of a co-located transmitter will not cooperate in addressing a non-compliance problem. This has occurred in the past with respect to broadcast sites, and our staff, as needed, has encouraged the non-cooperating licensee to assist in correcting the problem when appropriate. Similarly, we encourage applicants to notify our licensing bureaus if they believe that existing licensees are not allowing them reasonable access to a site, or are attempting to place unreasonable financial burdens on them. In this regard, we emphasize that if a transmitter at a multiple-transmitter site is approved under one set of guidelines but, later, another transmitter locates at the site and, as is required, operates under new exposure criteria, then the new criteria must be used to evaluate the entire site.

76. We are amending 47 CFR § 1.1307(b)(1), as requested by PCIA, to clarify the meaning of the phrase "total power of all channels" in Table 1. PCIA is correct that the term "facility" used in this context refers to the co-located transmitters owned and operated by a single carrier and is not intended to apply to all other transmitters that may be co-located at an antenna farm or on a rooftop for purposes of exclusion from routine evaluation.

77. Finally, in reviewing the issues raised in the various petitions, we have found that the rules adopted in the *Report and Order* are imprecise with respect to how to calculate the 5% threshold of responsibility for addressing non-compliance situations. Our rules specify RF exposure limits in terms of electric field strength, magnetic field strength, and power density.[73] It is the square of the field strength or power density that is most relevant in determining the potential effect of RF emissions on the human body.[74] Therefore, we are modifying our rules to make it clear that the 5% threshold applies to the power density limit or to the square of electric or magnetic field strength limit.

5. Preemption of State and Local RF Regulations

[73] *See* 47 CFR § 1.1310.

[74] Power density is equal to the square of the electric field strength divided by the characteristic impedance of free space (377 ohms). Similarly, power density is equal to the square of the magnetic field strength times the characteristic impedance of free space.

78. Section 704 of the Telecommunications Act of 1996[75] amends the Communications Act to provide a means for seeking relief of state and local regulations concerning the construction, placement or modification of "personal wireless service" facilities on the basis of the environmental effects of RF emissions.[76] Section 332(c)(7)(C)(i) of the Communications Act defines "personal wireless services" as "commercial mobile services, unlicensed wireless services, and common carrier wireless exchange access services."[77] Section 332(c)(7)(B)(v) provides that parties adversely affected by a state or local action concerning the construction, placement or modification of a personal wireless service facility that is based on concerns over RF emissions may seek relief from the courts or by petition to the Commission.[78]

79. We have previously considered the question of whether we should consider requests for relief filed under Section 332(c)(7)(B)(v) for licenses in communications services other than those defined by Congress as "personal wireless services."[79] In the *Report and Order*, we chose not to consider requests for relief filed under 332(c)(7)(B)(v) for communications services not specifically defined as "personal wireless services" in Section 332(c)(7)(C)(i).[80] We indicated that we expected that many states and localities would agree that no further regulation is warranted once they had an opportunity to review and analyze the guidelines we were adopting. We also indicated that, should our expectations prove to be misplaced and should FCC licensees in other services encounter a pattern of state or local activities which constitute an obstacle to the scheme of federal control of radio facilities set forth in the Communications Act, they should present us with such evidence as well as their view of the legal basis which could justify FCC preemption of state and local ordinances that concern other communication services.

80. In its petition for reconsideration, the EEA maintains that we were presented in the record of this proceeding substantial evidence to support adopting a preemption rule that

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[75] Telecommunications Act of 1996, Pub. L. No 104-104, 110 Stat. 56 (1996).

[76] Telecommunications Act of 1996, Section 704. Facilities Siting: Radio Frequency Emission Standards. 47 U.S.C. § 332(c)(7). This section states that: "No State or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the Commission's regulations concerning such emissions." 47 U.S.C. § 332(c)(7)(C) defines "personal wireless services" to mean "commercial mobile services, unlicensed wireless services, and common carrier wireless exchange access services."

[77] 47 U.S.C. § 332(c)(7)(C)(i).

[78] 47 U.S.C. § 332(c)(7)(B)(v).

[79] *See Report and Order* at paras. 164-165.

[80] *See Report and Order* at paras. 166-168.

would be applicable to all RF transmitters.[81] EEA notes that it filed, in 1994, a petition for rulemaking requesting such broad preemption, but its petition was only partially addressed in the *Report and Order*. EEA indicates that its petition presented specific evidence of restrictive state and local regulations that affected different types of FCC-authorized facilities, including both broadcast stations and "personal wireless service" facilities. EEA also indicates that it spelled out in its 1994 petition the legal basis for a broad preemption policy.

81. EEA argues that there is no rational basis for differentiating between personal wireless service facilities and other RF transmitters in preempting state and local regulation of RF emissions. From the perspective of health and safety, EEA states that there should be no distinction in the RF exposure regulations applying to various RF emitters (other than technically-justified differences in RF limits according to frequency). EEA claims that the fact that Section 704 of the Telecommunications Act only addressed the personal wireless services does not preclude broader preemption. EEA points out that we have already determined that we may implement new requirements under the Telecommunications Act by applying them to broader classes of carriers than were specifically mandated by the Act, especially when such action will facilitate the promotion of nationwide communications policy objectives.[82] By not applying consistent preemption, EEA argues that we could be creating situations where some transmitters are subject only to FCC regulation, while others are subject to both federal and state or local regulation for RF exposure. EEA notes that this could result in different requirements being placed on transmitters operating at the same location or even within the same frequency range, which they argue would be unfair, unjustified, and unnecessary.

82. EEA complains that, if we were to allow a "checkerboard" of state and local RF regulation that was not consistent with our guidelines, the implementation of new services such as digital broadcasting, and the transition to the digital environment, could be severely impaired. The NAB and the Wireless Cable Association International, Inc., (WCAI) expressed their support for EEA's position on broadening preemptive authority.[83] Also, the ARRL notes that there is "no possible justification" for preempting state and local RF regulation for one radio service and not for others, particularly for amateur stations.[84] The ARRL maintains that there is no indication in the Telecommunications Act or elsewhere that Congress intended that we could selectively preempt state and local RF regulation based only on the category of radio service affected.

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[81] EEA Petition at 3-11.

[82] *See* EEA Petition at 8 *citing Telephone Number Portability*, 11 FCC Rcd 8352, 8431-32 (1996).

[83] NAB Comments at 1, WCAI Comments at 2-3.

[84] ARRL Petition at 3 and 14.

83. Ameritech suggests that we further exercise our powers under Section 704 of the Act by preempting state and local regulation of the operation of personal wireless service facilities.[85] Ameritech contends that allowing state and local governments to govern how a station operates would be tantamount to saying "you can build your station but you cannot turn it on."[86] Ameritech also suggests that we establish a federal "rule of liability" for torts related to the environmental effects of RF emissions, so that licensees can avoid "unnecessary and conflicting" lawsuits by ensuring that they comply with our guidelines.

84. EEA supports Ameritech's proposal for the preemption of the operation of personal wireless facilities and maintains that it provides additional reasons why the Commission's "partial" preemption rule will have the effect of "unduly impeding" the construction and operation of facilities, since its rationale "applies with equal force" to all FCC-licensed transmitters.[87] David Fichtenberg (Fichtenberg) opposes Ameritech's proposal noting that the word "operation" found in the original version of H.R. 1555 brought to the Conference Committee, "was explicitly removed" from the final Conference Report.[88] Fichtenberg claims that this shows that Congress did not intend for the Commission to preempt the *operation* of transmitting facilities. Fichtenberg's position was supported by Alan Golden, Holly Fournier and Mary Beth Freeman.[89] Ameritech disagrees. Ameritech states that rather than deleting the word "operation" from the preemption language in the Act, Congress stated in the Conference Report:

> The limitations on the role and powers of the Commission under this subparagraph relate to local land use regulations are not intended to limit or affect the Commission's general authority over radio telecommunications, including authority to regulate the construction, modification and operation of radio facilities.[90]

85. Ameritech argues that this language clearly indicates that Congress recognizes the Commission's plenary authority over the operation of radio facilities and intends that the FCC continue to exercise this authority without limitation. Ameritech contends that this language suggests that the word "operation" was merely deleted because it was superfluous.[91] EEA

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[85] Ameritech Petition at 9-10.

[86] *Id.* at 3.

[87] EEA Comments at 9-11.

[88] David Fichtenberg Comments at 13-15.

[89] Alan Golden, Reply at 9; Holly Fournier and Mary Beth Freeman, Reply at 4.

[90] Ameritech Reply at 2 citing *Conference Report* at 209 (emphasis added).

[91] *Id.*

agrees that, under the opposing commenters' interpretation, a locality could not prevent the siting and construction of an FCC-licensed facility but could, nonetheless, prevent its operation.[92] According to EEA, this would be a complete evasion of Congresses mandate for preemption of the regulation of RF emissions.[93]

86. David Fichtenberg and others oppose the requests to broaden our preemption of state and local regulation of RF emissions.[94] Mr. Fichtenberg describes various studies that, he believes, support this opposition and discusses at length why he believes that the intent of Congress was only to preempt "personal wireless services." Dr. Marjorie Lundquist maintains that we possess no expertise with respect to public health and, therefore, we are a "questionable" choice as the agency to establish preemptive health guidelines for RF emissions.[95] The Ad-hoc Association says that we should only preempt the regulation of the placement, construction and modification of personal wireless facilities on the basis of environmental effects of RF emissions, and not for any other reasons.[96] The Ad-hoc Association suggests that we should also acknowledge that local jurisdictions have the authority to require further measurements of RF emissions for health and safety reasons, in particular, so that local jurisdictions can notify persons, hospitals or businesses of the potential for electrical interference. Holly Fournier and Mary Beth Freeman oppose requests for expanded preemption, pointing out that in light of government cutbacks and the rapid deployment of telecommunications facilities it is important that state and local jurisdictions oversee the proper operation of these facilities.[97]

87. Ameritech opposes the suggestions of David Fichtenberg, Dr. Marjorie Lundquist and the Ad-hoc Association.[98] According to Ameritech, duplicate regulation at the federal and state/local level would prove "disastrous" for industry, which could be required to comply with potentially conflicting standards. Furthermore, Ameritech notes, the various studies referred to by Mr. Fichtenberg "only point to the need for a uniform approach to RF regulation, which can only be carried out at the federal level."[99] Mr. Fichtenberg's comments

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[92] EEA Reply to Opposition at 5.

[93] *Id.*

[94] David Fichtenberg Comments at 1-25, Alan Golden Reply at 9, Dawn Mason Reply at 2.

[95] Dr. Marjorie Lundquist Comments at 4.

[96] Ad-hoc Association Petition at 8-13.

[97] Holly Fournier and Mary Beth Freeman, Reply at 4.

[98] Ameritech Comments at 5, Reply at 1-9.

[99] Ameritech Reply at 1.

are also opposed by the EEA, which declares that Mr. Fichtenberg is wrong in his interpretations of the Telecommunications Act with regard to broad-based preemption.[100]

88. Decision. Based upon the current record in this proceeding, we find that there is insufficient evidence at this time to warrant our preempting state and local actions that are based on concerns over RF emissions for services other than those defined by Congress as "personal wireless services."[101] We note that on May 30, 1997, the National Association of Broadcasters (NAB) and the Association of Maximum Service Television (MSTV) (jointly NAB/MSTV) filed a Petition for Further Notice of Proposed Rulemaking, urging preemption of certain state and local government restrictions on the siting of broadcast transmission facilities, based on petitioner's claims that unreasonable state and local regulations have frustrated the siting of broadcast facilities and could impede the Commission's scheduled conversion to the new digital television service. The NAB/MSTV petition, which raises additional preemption issues for broadcasting, will be addressed in a subsequent Commission action.

89. Concerning Ameritech's proposal that the Commission preempt state and local regulations concerning the *operation* of facilities based on RF-emission considerations, we agree with Ameritech that Congress did not intend to prevent the Commission from preempting state and local regulations concerning the operations of facilities simply by deleting the term "operation" from the final version of Section 332(c)(7). On the contrary, Congress made it clear, in the *Conference Report*, that enactment of Section 332(c)(7) of the Communications Act was not meant to affect the Commission's general authority to regulate the operation of radio facilities.[102] We find that the alternative reading is illogical and would render the statute useless and produce absurd results which Congress could not have intended. Therefore, we will continue to consider requests for relief of state and local government actions that prescribe or restrict the operation of personal wireless facilities pursuant to the authority granted to the Commission by Congress in Section 332(c)(7).

90. Regarding Ameritech's argument that the Commission should specify a federal rule of liability for torts related to RF emissions, we believe that such action is beyond the scope of this proceeding and we question whether such an action, which would preempt too broad a scope of legal actions, would otherwise be appropriate. Therefore, we cannot grant Ameritech's request.

6. Definition of "Covered SMR" Service

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[100] EEA Reply at 1.

[101] *See* 47 CFR 1.1307(e), as amended.

[102] Ameritech Reply at 2 citing H. Rep. No. 104-458, 94th Cong. 2nd Sess. 208-09 (1996) *Conference Report*.

91. In the *Report and Order*, we required the routine evaluation of RF electromagnetic fields produced from certain "covered" Specialized Mobile Radio (SMR) operations. *See* Table 1 of 47 CFR § 1.1307(b)(1). We also required the routine evaluation of certain portable and mobile transmitters used for covered SMR service as a condition for equipment authorization or use. *See* 47 CFR §§ 2.1091(c) and 2.1093(c). Covered SMR was defined as including geographic area SMR licensees in the 800-MHz and 900-MHz bands that offer real-time, two-way switched voice service that is interconnected with the public switched network and Incumbent Wide Area SMR licensees, as defined in Section 20.3 of our rules.[103] This definition was consistent with that used in a variety of recent proceedings relating to wireless issues.[104] Non-covered SMR operations were categorically excluded from performing routine environmental evaluations under our rules. In adopting different requirements for covered and non-covered SMRs, we were trying to ensure that those SMR operations that had the potential for causing excessive RF electromagnetic fields were subject to routine evaluations, and those that had little potential, were not.

92. The American Mobile Telecommunications Association, Inc., (AMTA) argues that the definition for covered SMR adopted in the *Report and Order* should be narrowed.[105] AMTA claims that the current covered SMR definition encompasses a large number of operators that provide primarily a dispatch service. It would also include, AMTA argues, systems that typically employ "push to talk" technology but allow interconnection capability as an ancillary feature. AMTA believes that it was our intent to cover only SMRs capable of serving the general consumer marketplace similar to cellular telephone or Personal Communications Service (PCS) stations.

93. AMTA has researched what factors distinguish traditional SMR systems from those that would operate in the consumer-oriented market. AMTA has identified one feature that, to the best of its knowledge, is present in all cellular and cellular-like systems, as well as in SMR systems seeking to compete with them. According to AMTA, unlike traditional, local SMR facilities, systems in each of these categories have an "in-network switching facility." This facility, AMTA explains, enables the system to reuse frequencies dynamically and thereby develop sufficient capacity to accommodate a mass market subscriber base, and to handoff communications between sites without manual subscriber intervention.

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[103] *See* Note following Table 1 in 47 CFR § 1.1307(b)(1). *See also Report and Order*, ET Dkt 93-62 at para. 65.

[104] *See*, for example, *First Report and Order*, CC Docket No. 55-116, 11 FCC Rcd 8352 (released July 2, 1996); *First Report and Order*, CC Docket No. 94-54, 11 FCC Rcd 18455 (released July 12, 1996); *Report and Order*, CC Docket No. 94-102, FCC 96-264 (released July 26, 1996); and *Report and Order*, CC Docket No. 94-54, 11 FCC Rcd 9462 (released August 15, 1996).

[105] AMTA Petition at 2-8.

94. As a result of its analysis, AMTA proposes to add the following new definition paragraph to Section 20.3 of the rules.

> "***Mobile Telephone Switching Facility.*** An electronic switching system that is used to terminate mobile stations for purposes of interconnection to each other and to trunks interfacing with the public switched network.

AMTA also proposes to modify the definitions in Sections 20.3 and 20.12 of the rules as follows:

> "***Incumbent Wide Area SMR Licensees.*** Licensees who have obtained extended implementation authorizations in the 800 MHz or 900 MHz service, either by waiver or under Section 90.629 of these rules, and who offer two-way interconnected voice service using a mobile telephone switching facility." *[emphasis in original]*
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> **Section 20.12(a)**
> "This Section is applicable only to providers of Broadband Personal Communications Services (Part 24, Subpart E of this chapter), providers of Cellular Radio Telephone Service (Part 22, Subpart H of this chapter), providers of Specialized Mobile Radio Services in the 800 MHz and 900 MHz bands that hold geographic licenses (included in Part 90,Subpart S of this chapter) and who offer two-way interconnected voice service using a mobile telephone switching facility, and Incumbent Wide Area SMR Licensees."

If we decide not to accept the above proposals, AMTA suggests modifying the covered SMR definition to apply only to systems serving more than 20,000 subscribers nationwide.

95. AT&T supports the AMTA request to narrow the definition of covered SMR and thereby expand the categorical exclusion for SMRs in general.[106] AT&T asks that we also categorically exclude similar facilities used by AT&T to provide only data under other radio services. AT&T's position is supported by AirTouch.[107] However, it is opposed by the Cellular Taskforce, which is concerned that such systems will proliferate rapidly in the near future.[108] PCIA supports modifying the definition of covered SMR consistent with other proceedings, and notes that it has petitioned for reconsideration of this definition in several proceedings where this term has been used.[109]

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[106] AT&T Comments at 4.

[107] AirTouch Reply at 3.

[108] Cellular Taskforce Reply at 6.

[109] PCIA Petition at 17-18.

96. RAM Mobile Data USA Limited Partnership (RMD) comments that it operates SMR systems that provide "interconnected" mobile data services that do not offer real-time, two-way switched voice service.[110] As such, RMD notes that its systems are currently excluded from our definition of "covered SMR" for purposes of environmental evaluation for RF exposure. RMD agrees that this exclusion is reasonable, since RMD's systems, unlike cellular and broadband PCS voice systems, typically involve relatively short duty-cycle transmissions and do not expose users to RF electromagnetic fields for extended periods of time. In commenting on the AMTA and PCIA petitions, RMD claims that the definition of "covered SMR" proposed by AMTA could, inadvertently, bring RMD's mobile data systems within the scope of the definition, and RMD advises us to reject AMTA's suggestions.

97. RMD maintains that AMTA's suggested alternative definition, based on the number of subscribers, would lead to inappropriate inclusions and exclusions from coverage. RMD points out that the number of subscribers served by a system is not relevant in determining whether a system would expose its users to excessive RF electromagnetic fields. Nonetheless, RMD does recognize that "hardship considerations" might favor an exclusion from "covered" status for small SMR systems. RMD urges us to retain the functional approach used in our definition of covered SMR services and to continue to exclude from that definition data-only SMR systems.

98. Decision. The petitions and comments filed regarding our definition of covered SMR raise a number of legitimate questions. For example, should our RF exposure requirements cover only certain SMRs, such as those that offer services comparable to cellular telephone and PCS stations? Is there a rationale based on RF exposure and health considerations for applying different requirements to different types of SMR operators? After considering the petitions and comments, and revisiting the basis for the decisions we made in the *Report and Order*, we now believe that our RF exposure rules should not differentiate between different types of SMR operations. Accordingly, we are modifying our rules to replace the term "covered SMR" with "SMR." As a result, all of the existing requirements for routine environmental evaluations will apply to all SMR operations.[111]

99. There are several reasons why we now think that the RF exposure rules should be applied to all SMRs. First, all SMR operations are authorized to use the same power levels, regardless of whether they are providing "covered" services or not. Second, certain SMR operations that would not meet the covered SMR definition, such as those providing dispatch services, can operate with a very high duty cycle during peak periods of the day. These SMR operations are also looking to increase the utilization of their spectrum by providing other capabilities in off-peak periods. Third, some of the SMRs targeted towards limited business use (as opposed to general public use) still provide interconnection capability, again

[110] RMD Comments at 1-3.

[111] This decision is based on technical factors specific to the issue of RF exposure. It does not address other proceedings for which the covered SMR definition is at issue.

potentially increasing the duty cycle. Fourth, the power levels of SMR stations are generally similar to those for paging, cellular and other stations which are covered by the RF exposure requirements. They generally exceed the typical power levels of other land mobile stations that we have categorically excluded. The possibilities for high power level and high duty cycle means that many SMRs would have a similar potential for causing exposure to excessive RF electromagnetic fields as paging, cellular, and PCS stations. Based on these considerations, we now believe that there is a potential for our RF exposure limits being exceeded by SMR operations, regardless of whether they meet the definition of a covered SMR or not, and conclude that all SMRs should be covered by our RF exposure rules. We are retaining the categorical exclusions for SMR based on height of the antenna and power, as indicated in Appendix A.

7. Development of a Revised Version of OST Bulletin 65

100. Since 1985, the Commission has made available a technical publication designed for use by Commission licensees and applicants as an aid in evaluating compliance with our RF exposure guidelines. As mentioned previously, we are now updating this publication, OST Bulletin 65, to reflect our adoption of new guidelines.

101. Some of the petitioners and commenters express opinions and offer suggestions about our procedures for developing this document and for allowing review of the revised draft. Ameritech maintains that we should ensure that "all affected parties" are given an opportunity to participate in the formulation of the bulletin.[112] Ameritech points out that we will likely receive the most useful comments from those industry representatives who are faced with concrete compliance responsibilities and who may have a greater incentive to focus on the practical impact of the new guidelines. The EEA urges us to establish an "open consultative" process for revising and issuing any bulletins that are aimed at implementation of the new guidelines.[113] PageNet notes that the forthcoming bulletin is needed to clarify the new RF rules as issued in the *Report and Order*.[114] PCIA proposes that the revised Bulletin 65 be subject to public notice and comment procedures, arguing that this could highlight areas where guidance is needed by industry.[115]

102. Decision. It should be emphasized that the guidance provided in Bulletin 65 is not binding and cannot be construed as a substantive rule; rather the Bulletin merely provides information and interpretations that may be used in complying with our RF exposure

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[112] Ameritech Petition at 7.

[113] EEA Petition at 14.

[114] PageNet Petition at 3.

[115] PCIA Petition at 8-9.

guidelines. Other methods of determining compliance are acceptable so long as they are based on generally accepted scientific methods. In the introduction of the existing bulletin, we indicate that: 1) the bulletin is not designed to establish mandatory procedures; 2) the bulletin is meant to provide guidance and assistance in evaluating compliance; and 3) other methods and procedures for evaluating compliance may be acceptable if based on sound engineering practice.

103. In September, 1996, a draft of a revised Bulletin 65 was sent to approximately fifty outside reviewers for comment and suggestions. The reviewers included a broad spectrum of technical experts and representatives from government, industry and academia, and many of these individuals are affiliated with telecommunications entities regulated by the Commission. Many comments were received by late October. Our staff has reviewed these comments and incorporated many of them into the final bulletin. Any additional review would needlessly delay the release of this important document. Therefore, we will not grant requests made by PCIA and others for a more extensive period of public comment. We will, however, take under consideration the comments of PageNet and others regarding areas that need to be addressed in the bulletin. In addition, Bulletin 65 may be revised periodically based upon feedback and questions from industry and the public.

8. Miscellaneous Clarifications and Corrections

104. Since issuing our *Report and Order* in this proceeding, we have identified a few corrections and clarifications that need to be made to rule sections that were amended. We are hereby making these changes (see Appendix A) to our rules as follows:

(1) Paragraph (b)(1) of 47 CFR § 1.1307 is modified to make it clear that both our MPE limits contained in 47 CFR § 1.1310 and our SAR limits contained in 47 CFR § 2.1093 generally apply, as appropriate, to all facilities, operations, and transmitters regulated by the Commission. The rule adopted in the *Report and Order* only made this specific statement with respect to MPE limits. This was an oversight, and a modification is being made here to prevent possible confusion.

(2) Table 1 in paragraph (b)(1) of 47 CFR § 1.1307 is modified to insert the words "ERP" that were inadvertently omitted from column 2 in the section of the table referencing evaluation criteria for Personal Communications Services in Part 24.

(3) We are amending our rules to make it clear that our categorical exclusions apply to transmitters mounted on the sides of buildings as well as those mounted on building roofs. Therefore, we are replacing the term "rooftop" with the term "building-mounted" in our rules for purposes of defining categorical exclusion. We believe that this change will remove possible confusion in the existing rules and will avoid potential situations where persons could be exposed to RF emissions in excess of our guidelines.

(4) Minor language changes have been made to the entry in Table 1 of Appendix A for Local Multipoint Distribution Service (LMDS) requirements (subpart L of part 101) to clearly reference the FCC adopted RF exposure limits in 47 CFR § 1.1310.

(5) Paragraph (b)(4) of 47 CFR § 1.1307 is modified to correct a typographical error.

(6) Paragraph (b) of 47 CFR § 2.1091, which applies to mobile devices, excluded devices intended to be used in "fixed locations." However, the term "fixed locations" was not defined. There was a possibility that some parties might incorrectly assume that certain consumer devices, such as wireless transmitters attached to a computer, are not covered by this paragraph. Accordingly, a definition for "fixed location" has now been added. Language has also been added to this paragraph, and to paragraph (b) of 47 CFR § 2.1093, to clarify our definitions of these devices and to make it clear that radiating "antenna" is intended to mean the "radiating structure" or structures of a mobile, unlicensed or portable device. We have also deleted the words "unlicensed devices" from the caption for Section 2.1091 to avoid confusion, since unlicensed devices can also be evaluated under 47 CFR § 2.1093, if they are classified as a "portable" device.

(7) A new paragraph (d)(4) is added to 47 CFR § 2.1091 to cover special cases where devices may not be easily classified as either mobile or portable. Examples would be modular or desktop transmitters. The wording in paragraph (d)(3) has also been modified to make it clear that warning labels and instructional materials may be used to attain compliance, if appropriate, for all devices covered by this rule part.

(8) Paragraph (d) of 47 CFR § 2.1093 is modified to reflect the fact that evaluation for RF exposure due to portable devices in terms of specific absorption rate (SAR) is only valid in the frequency range of 100 kHz to 6 GHz and that evaluation of portable devices above 6 GHz should be in terms of compliance with MPE limits for power density. It is further stipulated that measurements or calculations for compliance can be made at a minimum distance of 5 cm from the transmitting source.

(9) The *Report and Order* failed to amend 47 CFR § 26.51(d) and 47 CFR § 26.52 that deal with RF hazards in the General Wireless Communications Service (GWCS). These sections have been changed to conform to the new guidelines, and a category for GWCS transmitters has been added to Table 1 in Appendix A. In addition, 47 CFR § 2.1091 and 47 CFR § 2.1093 have been amended to require evaluation of GWCS portable devices and mobile devices operating above 3 watts EIRP. Exclusion levels for non-mobile and non-portable GWCS transmitters have been established as 1640 watts EIRP, in conformance with the exclusion threshold established for the Wireless Communications Service authorized under Part 27 of the Commission's rules. This threshold is based on calculations of reasonable distances from antennas where individuals might be expected to approach an antenna and where exposures would likely exceed the MPE limits.

Since all of the above changes to the rules involve minor or merely technical clarifying amendments, additional public notice and comment on these changes, beyond that given in the original *Notice* are unnecessary pursuant to Section 553(b)(3)(B) of the Administrative Procedure Act.[116]

9. Petitions for Reconsideration of Transition Period Extension

105. The *First Memorandum Opinion and Order* (*First MO&O*) in this proceeding extended the transition period for implementing the FCC's policies and guidelines for RF compliance.[117] Additional petitions for reconsideration were submitted to the Commission in response to the *First MO&O*, in accordance with Section 1.429 of the Commission's rules [47 CFR § 1.429(i)].[118] For various reasons, these petitioners request that we reconsider our decision on extending the transition period.

106. The Ad-hoc Association opposes the extension and urges the Commission to implement the guidelines without further delay. The Ad-hoc Association claims that in extending the transition period the Commission: (1) did not consult with federal health and safety agencies to determine the public health consequences of such action; (2) did not consider the adverse health effects of its action on people who live, work or attend school in the vicinity of FCC-regulated transmitters; (3) did not adequately explain the reason why it did not concur with the Ad-hoc Association's earlier objections to extension; (4) did not consider new information now available on the health consequences of human exposure to low-level RF fields; (5) has effectively established a transition period with two sets of limits (since the Commission applied new guidelines to PCS facilities in 1994).[119] The Ad-hoc Association also maintains that other petitioners seeking an extension of the transition period have not established proof that implementation by the original date would be unreasonably burdensome, nor have they justified the necessity for awaiting publication of the Revised OET Bulletin 65 before implementing new guidelines.[120]

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[116] *See* 5 U.S.C. 553(b).

[117] *First Memorandum Opinion and Order,* ET Docket 93-62, adopted December 23, 1996, 11 FCC Rcd 17,512 (1997).

[118] Petitions for Partial Reconsideration were filed by Ameritech Mobile Communications, Inc. (Ameritech) and Northeast Louisiana Telephone Company, Inc. (Northeast). Petitions for Reconsideration were filed by the Ad-hoc Association of Parties Concerned About the Federal Communications Commission's Radiofrequency Health and Safety Rules (Ad-hoc Association) and the Cellular Phone Taskforce.

[119] Ad-hoc Association Petition at 2-15.

[120] Ad-hoc Association Petition at 18-21.

107. The Cellular Phone Taskforce also opposes our extension of the transition period, claiming that the extension will allow the proliferation of facilities that will harm and discriminate against individuals who are "electrosensitive."[121] The Cellular Phone Taskforce states that recent evidence and studies support its position, including evidence that "thousands of people" in New York City are suffering from "radiation sickness" as a result of PCS technology.

108. In their comments, Ameritech and AT& T Wireless disagree with the statements made by the Ad-hoc Association and the Cellular Phone Taskforce.[122] Ameritech and AT&T Wireless say that the Ad-hoc Association has underestimated the resources and effort needed to achieve compliance with the FCC's new RF guidelines and policies. AT&T Wireless argues further that nothing in the petitions of the Ad-hoc Association and the Cellular Phone Taskforce justifies a reversal of the Commission's decision and that rather than demonstrating that delaying the transition date would be harmful to public health the petitioners have simply repeated claims made in their previous petitions.[123] The Cellular Telephone Taskforce responds that this view is premature pending resolution of the issues raised in the original petitions.[124] The Taskforce also maintains that in opposing its petition, Ameritech has not addressed any of the concerns raised by the Taskforce regarding compliance with the new guidelines.[125]

109. Ameritech and Northeast request that the transition period be extended even further beyond the September 1, 1997, date specified in the *First MO&O*. Ameritech and Northeast urge the Commission to link the effective date of new guidelines to the release of the Commission's revised Bulletin 65, which will provide guidance on compliance for applicants and licensees. Specifically, they maintain that the new date should be one year after release of Bulletin 65 to give applicants and licensees ample time to accurately evaluate their compliance with the new policies and guidelines.[126] Ameritech and Northeast argue that given the many complex issues raised by the new guidelines and the petitions for reconsideration it may be several months before the revised Bulletin can be issued and, consequently, industry will not have adequate time to comply with the new rules. As an alternative, Ameritech and Northeast request that the Commission announce its intention to take a "flexible approach" in further extending the September 1, 1997, deadline or in granting requests for waivers of this deadline. Comments filed by AirTouch Communications, Inc.,

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[121] Cellular Phone Taskforce Petition at 1-3.

[122] Ameritech Comments at 1-4. AT& T Wireless Comments at 1-5.

[123] AT&T Wireless Comments at 3-4.

[124] Cellular Phone Taskforce Reply to AT&T Wireless at 1.

[125] Cellular Phone Taskforce Reply to comments of Ameritech at 1-2.

[126] Ameritech Petition at 1-4, Northeast Petition at 1-4.

and AT&T Wireless support the petitions of Ameritech and Northeast.[127] However, AirTouch suggests that if a one-year extension beyond release of Bulletin 65 is not possible, an eight-month extension would be reasonable.

110. Decision. In our *First MO&O* in this proceeding we stated that we have no evidence that extending the transition period would have a significant adverse effect on public health.[128] We re-state that conclusion. The new RF exposure guidelines are in certain respects more restrictive than those they replace, particularly with respect to exposure of the general public. However, with regard to most of the personal wireless facilities that are the subject of the petitions of the Ad-hoc Association and the Cellular Phone Taskforce, there is ample evidence that most of these facilities will result in levels of exposure of the general public that are many times lower than our new guidelines.

111. As previously discussed in this *Order* and in the original *Report and Order* in this proceeding, we have relied on the advice and comments of the federal health and safety agencies as to what levels of RF exposure are protective of the public health. The Commission does not have the expertise to make independent judgements on such alleged health effects as "electrosensitivity" or other reported effects on human health. This is the responsibility of the federal health and safety agencies and other qualified public health organizations. Therefore, we continue to consider our new guidelines appropriately protective of public health. There is no evidence to suggest that transmitters or facilities that comply with our guidelines will cause adverse health effects. Our guidelines adopt the most conservative aspects of the ANSI/IEEE and the NCRP recommended exposure criteria and have been recommended by all of the relevant health and safety agencies. Moveover, we do not agree with the Ad-hoc Association and the Cellular Phone Taskforce that even a minimal extension of the initial transition period should be denied. We agree with Ameritech, Northeast, Airtouch and AT&T Wireless that a further extension is necessary to allow applicants and licensees sufficient time to analyze the newly revised version of OET Bulletin 65.

112. For these reasons we will agree to a limited further extension of the transition period to October 15, 1997. Since this *Order* and the revised Bulletin 65 will be issued at the same time, this will allow sufficient time for applicants and licensees to review these documents. Copies of this *Order* and the revised Bulletin 65 will be immediately available on the Commission's World Wide Web page (www.fcc.gov). We do not agree that there is a need for a period as long as eight months to one year beyond issuance of the final version of Bulletin 65. Ample time has already been given to applicants and licensees to begin considering compliance issues, and, as noted, a preliminary draft of Bulletin 65 was made

[127] AirTouch Comments at 1-3. AT&T Wireless Comments at 1-5.

[128] See *First MO&O* at paragraph 8.

available to many outside reviewers several months ago. Therefore, the petitions of Ameritech and Northeast are partially granted.[129]

10. Treatment of Existing Facilities, Operations and Devices

113. Under the rules adopted in the *Report and Order* in this proceeding, as modified by the *First MO&O,* all applications to the FCC for construction permits, license renewals and requests for station modifications filed after September 1, 1997 are subject to analysis under our new RF exposure guidelines, whereas existing sites are required to come into compliance only at the time of renewal or modification. In our Order today, we extend the initial transition period under Section 1.1307(b)(4) for implementing the new RF exposure guidelines to October 15, 1997, and clarify that all new facilities constructed after that date must comply with the new guidelines, regardless of whether an application is filed with the Commission. Licensees filing applications for new facilities, renewals or modifications are also required to bring their operations into compliance with the new guidelines. We also revise our rules to require existing sites to come into compliance as of a date certain.

114. We are revising our rules because we believe that the health and safety concerns that underlie the adoption of our new guidelines warrant reconsideration of the ways we have applied these requirements in the past. Previously, our rules have been triggered by applications for new facilities, modifications to existing facilities, or renewals of existing licenses. Although this approach is appropriate for most of the broad range of environmental issues our rules were designed to address, we believe that a different approach is warranted in matters of RF exposure. Because of potential public heath and safety concerns, we adopted more conservative RF exposure guidelines based on the recommendations of the relevant federal health and safety agencies, and we will require all new facilities constructed after the effective date of this Order to comply with the new guidelines by a date certain.[130] We also believe this approach is consistent with Congressional intent underlying Section 704 of the Telecommunications Act of 1996, that the Commission's rules in this proceeding "contain adequate, appropriate and necessary levels of protection to the public."[131] We recognize that licensees require a reasonable amount of time to bring existing facilities into compliance due

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[129] Since we are taking this action the late petitions recently filed by Ameritech and PCIA requesting immediate deferral of the September 1, 1997, implementation date are moot and are denied. *See "Emergency Request for Immediate Deferral of Transition Date,"* filed August 8, 1997, by the Personal Communications Industry Association, and *"Request for Extension of Compliance Deadline,"* filed August 15, 1997, by Ameritech Mobile Communications, Inc.

[130] In the Notice of Proposed Rule Making in this docket we specifically asked for comment on "how best to treat equipment and facilities that are in use but do not comply with the new guidelines." See Notice of Proposed Rule Making, ET Docket 93-62, at para. 26.

[131] H. R. Rep. No. 204, 104th Cong., 1st Sess. 95 (1995).

to the variety of different site configurations and settings. Accordingly, we will require all existing facilities to be brought into compliance with the new rules no later than September 1, 2000. If a licensee believes that its facility cannot be brought into compliance, the licensee must file an Environmental Assessment by this date.[132]

III. NOTICE OF PROPOSED RULEMAKING

A. Introduction

115. This proceeding was originally initiated by Commission staff to consider issues concerning Sections 332(c)(7)(B)(iv) - (v) of the Communications Act. However, while these issues were being studied, on March 19, 1997, the Personal Communications Industry Association (PCIA) sent a letter to the Wireless Telecommunications Bureau (WTB) requesting that the WTB initiate a proceeding to develop policy guidelines that clearly set forth under what circumstances state and local "testing and documentation requirements related to the environmental effects of radio frequency emissions become so onerous as to effectively constitute state regulation of these emissions."[133] PCIA asks that, *inter alia*, we: (1) clearly define what testing and reporting procedures states and localities may adopt in order to ensure compliance with federal RF regulations; (2) prohibit adducing evidence regarding the health effects of RF emissions at zoning board hearings absent an affirmative showing that the zoning applicant has failed to comply with federal standards; and (3) promulgate streamlined procedures for processing petitions that request preemption of state and local rules that attempt to regulate RF emissions in a manner inconsistent with federal standards.[134] On July 15, 1997, the Commission's Local and State Government Advisory Committee (LSGAC) submitted its Recommendation Number 5 concerning PCIA's letter.[135] LSGAC recommends that the Commission work with state and local governments and industry to recommend a mutually acceptable RF testing and documentation protocol that may be adopted by state and local governments. Because we are considering the issues raised by PCIA in this *Notice*, we will incorporate PCIA's letter and the LSGAC Letter into the record and consider both as comments in this proceeding.

116. CTIA first raised the issue of the preemption of state and local government regulations that bar or impede Commercial Mobile Radio Service (CMRS) providers from

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[132] *See* 47 CFR Section 1.1308(a).

[133] *See* Letter to Michele F. Farquhar, Chief and Rosalind Allen, Deputy Chief of Wireless Telecommunications Bureau from Jay Kitchen, President, Personal Communications Industry Association (March 19, 1997) (*PCIA Letter*).

[134] *PCIA Letter* at 2.

[135] *See* LSGAC's letter and attached Recommendation Number 5, filed July 15, 1997 (LSGAC Letter).

locating or constructing new towers in a petition filed in 1994 (*CTIA '94 Petition*).[136] However, the *Conference Report* accompanying the passage of the Telecommunications Act, stated that the Commission should terminate "[A]ny pending Commission rulemaking concerning the preemption of local zoning authority over the placement, construction or modification of CMS facilities . . . ."[137] In addition, now that a national wireless facilities siting policy has been incorporated into Section 332 of the Communications Act, many of the issues raised by CTIA are now moot. As such, we are dismissing the *CTIA '94 Petition*.

117. In this proceeding, we seek comment on proposed procedures for filing and reviewing requests filed pursuant to Section 332(c)(7)(B)(iv)-(v) of the Communications Act for relief from state or local regulations on the placement, construction or modification of personal wireless service facilities based either directly or indirectly on the environmental effects of RF emissions. As the siting of personal wireless facilities expands and numerous new personal wireless service providers seek to construct their facilities, we anticipate being called upon more frequently to review petitions alleging that a state or local government has acted or failed to act in a manner that is inconsistent with Section 332(c)(7)(B)(iv)-(v). Therefore, we believe it is appropriate to initiate a rulemaking proceeding to seek comment on the procedures we should adopt for reviewing Section 332(c)(7)(B)(iv)-(v) petitions.

118. In the Telecommunications Act of 1996 ("Telecommunications Act"),[138] Congress gave the Commission authority to grant relief from state or local regulations of personal wireless service facilities based on the environmental effects of RF emissions to the extent that the facilities in question comply with the Commission's rules regarding such emissions. While we have considered, in the *Report and Order and Memorandum Opinion and Order* in this proceeding, the more general questions of how to define the term "personal wireless services," with respect to consideration of requests for relief filed under Section 332(c)(7)(B)(iv) of the Communications Act,[139] and whether we have the authority to consider actions that are taken with respect to operating facilities, we have not previously considered whether to adopt formal procedures for reviewing such requests.[140] In order to most

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[136] *See* Cellular Telecommunications Industry Association's (CTIA) "Petition for Amendment of the Commission's Rules to Preempt State and Local Regulation of Commercial Mobile Radio Service (CMRS) Transmitting Facilities," RM-8577, filed December 22, 1994 (*CTIA '94 Petition*); *see also* Amendment of the Commission's Rules to Preempt State and Local Regulation of Tower Siting for Commercial Mobile Radio Service Providers, Cellular Telecommunications Industry Association's Petition for Rulemaking, RM-8577, *Public Notice*, Report No. 2052 (January 18, 1995).

[137] *See* 47 U.S.C. § 332(c)(7)(A); *see also* H. Rep. No. 104-458, 94th Cong. 2nd Sess. 207-208 (1996) (*Conference Report*).

[138] Pub. L. No. 104-104, 110 Stat. 56 (1996).

[139] 47 U.S.C. § 332(c)(7)(B)(iv).

[140] *See Report and Order* at ¶¶ 164-168; *Memorandum Opinion and Order* at ¶ 84.

effectively and efficiently implement the provisions of the Telecommunications Act regarding RF emissions and personal wireless service facilities siting, we believe that clear procedures must be developed that allow parties adversely affected by actions or regulations based on RF emissions to petition for relief and that also allow interested parties to participate in proceedings addressing such petitions. This *Notice* seeks comment on procedures to permit the rapid resolution of such requests, and proposes definitions for various terms relevant to such proceedings. With these proposals, we seek to balance the legitimate role of state and local authorities in zoning and land use matters with the statutory goal of promoting fair competition in the provision of personal wireless services without compromising public health or safety. We believe these proposals will allow personal wireless services to be deployed and delivered to consumers as rapidly as possible, while preserving the authority of state and local jurisdictions in land use matters and protecting the public health.

119. We stress that the procedures we propose herein shall be limited to those circumstances where a request for relief is filed concerning a specific state or local regulation, action or failure to act pursuant to Sections 332(c)(7)(B)(iv) - (v) of the Communications Act. These procedures will not apply to parties that file complaints with the Commission about the alleged effects of RF emissions from existing or modified wireless facilities for which no adverse state or local action has occurred or is pending or to parties that complain that an existing or modified wireless facility does not comply with our recently revised RF guidelines. Those parties, including state and local governments, must follow the established complaint procedures set forth in our rules.

B. Background

1. Sections 332(c)(7)(B)(iv) - (v) of the Communications Act

120. Prior to passage of the Telecommunications Act, there was no specific statutory authority providing that the Commission had jurisdiction over issues concerning environmental effects of RF emissions. Issues concerning RF emissions were reviewed by the Commission on a case-by-case basis.[141] Without the specific statutory authority, the Commission declined to preempt such state and local regulations.[142] Prior to passage of the Telecommunications Act, some state and local governments expressed concerns about the environmental effects of RF emissions and appeared to be adopting ordinances that restricted

[141] *See* Guidelines for Evaluating the Environmental Effects of Radio Frequency Radiation, ET Docket No. 93-62, *Report and Order*, 11 FCC Rcd 15123, ¶ 164 (1996) (*citing National Association of Broadcasters*, 5 FCC Rcd 486 (1990)) (*Report and Order*); *see also Responsibility of FCC to Consider Effects of RF*, 100 FCC 2d 543, 557-558 (1985).

[142] *See National Association of Broadcasters*, 5 FCC Rcd 486 (1990); *see also Responsibility of FCC to Consider Effects of RF*, 100 FCC 2d 543, 557-558 (1985).

the siting of wireless facilities based on such concerns.[143] For example, certain ordinances were adopted that expressly forbade the construction of all CMRS towers, imposed lengthy moratoria on the construction of facilities or restricted the construction of facilities in certain zones.[144]

121. With the passage of the Telecommunications Act, Congress amended the Communications Act of 1934 to add a new Section 332(c)(7),[145] which preserves the authority of state and local governments over zoning and land use matters regarding the placement, construction and modification of personal wireless service facilities.[146] This authority is limited, however, by Sections 332(c)(7)(B)(i), (ii) & (iii), which provide: (1) that state and local regulations concerning the siting of personal wireless facilities shall not unreasonably discriminate among providers of functionally equivalent services; (2) that such regulations shall not prohibit or have the effect of prohibiting the provision of personal wireless services; (3) that local decisions concerning the siting of personal wireless facilities be issued within a reasonable period of time; and (4) that such decisions be in writing and supported by substantial evidence contained in a written record.[147] Parties adversely affected by state or local regulations that do not comply with these provisions may seek relief in a court of competent jurisdiction.[148]

122. Section 332(c)(7)(B)(iv) of the Communications Act provides the Commission with the specific authority to provide relief from state and local regulations that are based on environmental effects of RF emissions to the extent that personal wireless service facilities comply with the Commission's RF emissions guidelines. This Section provides that:

> No State or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the

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[143] *See* the following comments filed in response to the *CTIA '94 Petition*: United States Cellular Corporation Comments at 5; Southwestern Bell Mobile Systems, Inc. Comments at 10-11; American Personal Communications Comments at 4; NYNEX Mobile Communications Company Comments, Attachment 2; McCaw Cellular Communications, Inc. Comments at 11-12, 13, 15; Century Cellunet, Inc. Reply Comments at 6-7; Bay Area Cellular Telephone Company Reply Comments at 2-3.

[144] *Id.*

[145] 47 U.S.C. § 332(c)(7).

[146] *See Conference Report* at 207-208. Section 332(c)(7)(C)(ii) of the Communications Act defines "personal wireless service facilities" as those "facilities for the provision of personal wireless services." 47 U.S.C. § 332(c)(7)(C)(ii). Personal wireless services are defined as "commercial mobile services, unlicensed wireless services, and common carrier wireless exchange access services." 47 U.S.C. § 332(c)(7)(C)(i).

[147] *See* 47 U.S.C. § 332(c)(7)(B)(i) - (iii).

[148] *See* 47 U.S.C. § 332(c)(7)(B)(v).