

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of)	
)	
Reassessment of Federal Communication Commission Radiofrequency Exposure Limits and Policies)	ET Docket No. 13-84
)	
)	
Proposed Changes in the Commission’s Rules Regarding Human Exposure to Radiofrequency Electromagnetic Fields)	ET Docket No. 03-137
)	
To: The Commission		

**COMMENTS OF PCIA – THE WIRELESS INFRASTRUCTURE ASSOCIATION
AND THE HETNET FORUM**

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PCIA – The Wireless Infrastructure Association and The HetNet Forum (“PCIA”)¹ respectfully submit these comments on behalf of its members in response to the Federal Communications Commission’s (“FCC” or “Commission”) *Further Notice of Proposed Rulemaking* and *Notice of Inquiry* examining the Commission’s rules related to radiofrequency (“RF”) exposure.²

¹ PCIA is the national trade association representing the wireless infrastructure industry. PCIA’s members develop, own, manage, and operate towers, rooftop wireless sites, and other facilities for the provision of all types of wireless, telecommunications, and broadcasting services. PCIA and its members partner with communities across the nation to affect solutions for wireless infrastructure deployment that are responsive to the unique sensitivities and concerns of each community. The HetNet Forum, formerly The DAS Forum, is a membership section of PCIA dedicated to the advancement of heterogeneous wireless networks. “Heterogeneous networks” combine “macro,” or large, infrastructure such as monopoles with small cells and distributed antenna systems. By integrating the two types of infrastructure together, carriers are able to target geographic areas to increase network capacity.

² Reassessment of Federal Communications Commission Radiofrequency Exposure Limits and Policies; Proposed Changes in the Commission’s Rules Regarding Human Exposure to Radiofrequency Electromagnetic Fields, ET Docket No. 13-84, ET Docket No. 03-137, *Further Notice of Proposed Rulemaking and Notice of Inquiry*, FCC 13-89 (rel. March 29, 2013) (“*RF FNPRM/NOI*”).

INTRODUCTION AND SUMMARY

Modernizing the radiofrequency (“RF”) exposure rules to allow industry to provide telecommunications services to the public “in the most efficient and practical manner possible,”³ while ensuring that the public is appropriately protected from any potential adverse effects from RF exposure, are key factors in the success of wireless infrastructure deployment. Ultimately, such efforts will improve the quality and availability of wireless services for consumers.

In particular, the Commission should streamline and update the RF exposure rules, create non-service based exemptions, and adopt clearer, more standardized mitigation techniques. However, any revised exemption criteria must not unnecessarily exclude facilities that pose no safety concerns, and any revised mitigation measures must retain the flexibility to account for today’s diverse real-world siting conditions, particularly on rooftops. To facilitate compliance, the FCC should adopt a mitigation “safe harbor” and coordinated training programs. Clearer rules that facilitate compliance will, in the end, increase public confidence in the RF safety of workers and the general public. Further, the Commission should phase in the implementation of the mitigation requirements over two years given the substantial changes in signs, barriers, and training that are proposed.

The FCC should also take this opportunity to update its guidance to the public by creating a consumer-centric wireless facilities RF exposure guide. The guide should emphasize not only that the FCC has exclusive jurisdiction over RF emissions from wireless infrastructure, but also that fixed wireless transmitters generally pose no danger to human health and that the Commission’s guidelines incorporate wide margins of safety.

³ *Id.*, ¶ 6.

DISCUSSION

I. THE COMMISSION SHOULD UPDATE ITS RF EXPOSURE RULES WHILE MAINTAINING FLEXIBLE APPROACHES TO PROTECT THE PUBLIC

The Commission should adopt its proposal of new terminology for categorical exclusions. More efficient, practical, and consistent evaluation procedures for the FCC’s RF guidelines will serve the public interest and help ensure compliance with the agency’s rules. A clear and more standardized approach to mitigation – while remaining flexible to account for real-world conditions that vary greatly – will harmonize criteria for compliance. In adopting new regulations, the Commission should recognize that some mitigation measures may simply be beyond a licensee’s control, and adoption of a mitigation “safe harbor” can increase public safety and aid in provider compliance. A centralized training program for the Commission’s RF rules will also help ensure consistency, while lowering costs and easing administrative burdens.

A. The Proposal to Use New Terminology for Categorical Exclusions from Environmental Processing Should Be Adopted

The Commission should modify the terminology used when describing facilities that do not require routine RF evaluation because they fall within the safety limits set forth in Section 1.1307(b) of the FCC’s rules.⁴ Currently, the FCC describes such facilities as “categorically excluded” from routine RF evaluation,⁵ but this term has broader connotations under the National Environmental Policy Act (“NEPA”).⁶ Under NEPA, and as used elsewhere in the Commission’s environmental rules, the term “categorical exclusion” refers to facilities that do not require further processing or preparation of an environmental assessment (“EA”) on any environmental

⁴ *Id.*, ¶ 113.

⁵ 47 C.F.R. § 1.1307(b).

⁶ *See* 42 U.S.C. § 4332(2)(C); 40 C.F.R. § 1508.4.

grounds.⁷ Here, because facilities that fall within the Section 1.1307(b) safety limits are only meant to be exempted from further RF evaluation and not excluded from broader environmental processing altogether, PCIA agrees that the Commission should use the term “exemption” to describe facilities that do not require routine RF evaluation.

B. The Proposed MPE Exemption Criteria Are Unnecessarily Restrictive and Can Be Broadened without Compromising Safety or Ease of Use

The Commission should replace the current service-specific Maximum Permissible Exposure (“MPE”) exemption criteria in Table 1 of Section 1.1307(b)(1) of its rules with a revised table that specifies Effective Radiated Power (“ERP”) and distance criteria for each of five frequency bands.⁸ Service-specific rules are subject to change, making a service-based exemption scheme hard to keep up to date.⁹ Nonetheless, the proposed exemption criteria are needlessly restrictive and will require routine evaluations for more sites – at an unnecessary greater cost to licensees – than required under the current rule that has safely protected the public for years. Accordingly, the Commission should adjust the proposed criteria to better exempt facilities that pose no risk of harm to the public.

⁷ See, e.g., 47 C.F.R § 1.1306 (listing actions that are categorically excluded from environmental processing). Typically, categorical exclusions (“CEs”) are used for minor federal actions that have no or only minor environmental effects. The Commission has therefore excluded certain collocations and the installation of wire or cable along existing corridors from the need to prepare an EA. See 47 C.F.R. § 1.1306, note 1.

⁸ See *RF FNPRM/NOI*, ¶ 128 (proposing to “exempt from routine environmental evaluation a single [fixed] transmitter operating with up to a calculated maximum time-averaged effective radiated power given a separation distance”); see generally *id.*, ¶¶ 128-38.

⁹ See *id.*, ¶ 130.

In particular, the proposed threshold ERP fails to capture within the exemption certain facilities mounted on dedicated wireless support structures where RF exposure can be safely controlled by limiting access. As the Commission has recognized, the proposed exemption criteria are “based on worst-case calculations” and therefore “do not necessarily indicate that a transmitting station is not in compliance with the Commission’s exposure limits.”¹⁰ Accordingly, the Commission should adjust the proposed formula applied to account for transmitters operating in the 300 MHz to 3 GHz bands that are mounted on dedicated wireless support structures.¹¹ Dedicated wireless support structures include towers,¹² monopoles, water tanks, and utility infrastructure where access can be controlled through positive access control and other mitigation techniques beyond what is available on rooftops and other collocated facilities. By changing only the formula applied to transmitters in the 300 MHz to 3 GHz range on access-controlled structures, the exemption criteria will remain simple, easy to apply, and technology-neutral while protecting the public.¹³

C. Revised Mitigation Measures Must Retain the Flexibility to Account for the Diverse Real-World Siting Conditions that Exist Today

The Commission should move forward to implement a more standardized and clear approach to mitigation.¹⁴ Mitigation involves post-evaluation procedures to ensure exposure limits are not exceeded, such as labels, signs, barriers, training, and enforcement. The FCC must

¹⁰ *Id.*, ¶ 133.

¹¹ PCIA member companies will be proposing in the record specific and easy-to-apply changes to the proposed formula to achieve these goals.

¹² See Nationwide Programmatic Agreement Regarding the Section 106 National Historic Preservation Act Review Process, § II.A.14 (Sept. 2004) (defining “Tower”), *appended as App. C to 47 C.F.R. Part 1*.

¹³ *RF FNPRM/NOI*, ¶¶ 134-36.

¹⁴ *Id.*, ¶¶ 3, 175, 189-90. In order to “provide flexibility and certainty to licensees and site owners” while “ensuring enforceable compliance with our exposure limits,” the Commission is proposing new specific mitigation actions by category of exposure where the exposure limits in Section 1.1310 of the FCC’s rules are exceeded. *Id.*, ¶¶ 184-86.

ensure, however, that any revised mitigation measures retain the flexibility – and provide an ample implementation period – to account for diverse real-world siting conditions. In addition, the Commission should add a “safe harbor” provision to its rules for rooftop siting scenarios that offers protection for the provider if it complies with the safe harbor. Finally, the Commission should phase in the implementation of the mitigation requirements over two years given the substantial changes in signs, barriers, and training that are proposed.

As the Commission acknowledges, while “clear rules that can be followed where feasible can help avoid both inadvertent over-exposure and unnecessary public concern,” “rigid requirements may not be practical in all cases.”¹⁵ Flexibility should be the cornerstone of any new mitigation regulations as “[r]adio transmitters and their antennas have been deployed in a wide variety of forms” and “each transmitter site is different.”¹⁶ Rooftops in particular present a number of challenges that the Commission should account for as it revises its proposed mitigation measures.

First, the Commission should ensure that its RF mitigation rules do not conflict with other federal, state or local laws or safety codes. For example, fire codes in certain municipalities may prevent positive access control for rooftops.¹⁷ In addition, building codes may impact the placement of signage or barriers to prevent transient RF exposure.

¹⁵ *Id.*, ¶ 185.

¹⁶ *Id.*, ¶ 186.

¹⁷ *See, e.g.*, NEW YORK CITY, NY., ADMIN. CODE title 29, §§ 504, 1027 (2013), http://www.nyc.gov/html/fdny/html/firecode/table_of_contents.shtml; SAN FRANCISCO, CA., FIRE CODE § 504.3.1 (2013), [http://www.amlegal.com/nxt/gateway.dll/California/fire/firecode?f=templates\\$fn=default.htm\\$3.0\\$vid=amlegal:san francisco_ca\\$sync=1](http://www.amlegal.com/nxt/gateway.dll/California/fire/firecode?f=templates$fn=default.htm$3.0$vid=amlegal:san francisco_ca$sync=1); BOSTON, MA., FIRE PREVENTION CODE art. XI, § 11.06 (1979), http://www.cityofboston.gov/images_documents/preven_code_tcm3-4039.pdf.

Second, the Commission should ensure that its mitigation measures account for the diverse nature of many rooftops and the variety of HVAC and other equipment that can affect the placement, visibility, and overall effectiveness of signage and access restrictions. Additionally, access to rooftops is often managed by the building landlord and may require a clear duty from the landlord to work with the provider to mitigate exposure (*e.g.*, keeping access to rooftops restricted). As the Commission has recognized, the “level of cooperation between property owners, managers, licensees, and subcontractors may be an issue.”¹⁸

Third, the Commission should ensure that its mitigation measures applicable to rooftops are those that the licensee can reasonably control.¹⁹ In rooftop scenarios, licensees can ensure that the property owner is made aware of the importance of restricting access and provide training, signage, and contact information. However, licensees should not be held liable for non-compliance with the RF rules if, despite the best efforts of the licensee, a third party does not comply (for example, fails to keep an access door locked). Because these real-world conditions may be beyond a licensee’s control, the FCC should adopt a mitigation safe harbor for rooftop sites.²⁰

¹⁸ *RF FNPRM/NOI*, ¶ 193.

¹⁹ The Commission notes in the *RF FNPRM/NOI* that “our jurisdiction for determination of liability with respect to towers used for communications purposes is not necessarily limited to just licensees,” citing Sections 503(b)(5) and 303(q) of the Communications Act. Those statutory provisions, however, refer to the FCC’s jurisdiction over non-licensee tower owners for purposes of air safety, such as lighting and marking – not RF emissions. As the Commission states regarding exposure limits, “it is ultimately the licensee that is responsible for compliance.” *Id.*, ¶ 193.

²⁰ The Commission has long sanctioned the use of safe harbors in other contexts. *See, e.g.*, Amendment of Parts 1, 2, 22, 24, 27, 90 and 95 of the Commission’s Rules to Improve Wireless Coverage Through the Use of Signal Boosters, *Report and Order*, 28 FCC Rcd 1663, 1690 (2013) (adopting safe harbors for provider-specific and wideband signal boosters); Implementation of the Commercial Advertisement Loudness Mitigation (CALM) Act, *Report and Order*, 26 FCC Rcd 17222, 17237-38 (2011) (establishing a safe harbor to demonstrate compliance with regard to embedded commercials). Safe harbors recognize the impracticality of rules that “demand the impossible.” *Cf. McNeil v. Time Ins. Co.*, 205 F.3d 179, 187 (5th Cir. 2000) (“It is a flawed and unreasonable construction of any statute to read it in a manner that demands the impossible.”).

Under the safe harbor, a carrier that takes the steps detailed below at each rooftop siting location will be deemed in compliance with FCC rules. These steps should include: best efforts to work with property owners and managers (*i.e.*, providing contact information, procedures for access, signage, when control should be maintained, and when barriers are required); completion of training programs; and providing written materials. In short, if the provider meets an established list of mitigation techniques, the provider should be deemed compliant.²¹ Adoption of a mitigation safe harbor for rooftop siting scenarios would provide dual benefits – clear safety RF parameters for workers and the public, and a clear path for providers to achieve compliance who may otherwise face uncertainty given the complexity of RF siting scenarios.²²

In addition, with respect to the Commission’s mitigation proposal that licensees place signage at the point where each tier is exceeded (*i.e.*, one at general, another at occupational, etc.),²³ the Commission must ensure that over-signage does not result “in undue alarm, confusion, and subsequent disregard of meaningful postings.”²⁴ PCIA therefore supports language in the proposed rules that recognizes that lower category signs would be unnecessary in

²¹ As an alternative, but less desirable, option, the Commission could adopt a rebuttable presumption that a rooftop site is in compliance with the agency’s RF rules if the provider meets an established list of mitigation techniques, as detailed above. The Commission has a long history of establishing rebuttable presumptions. *See e.g.*, Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers, *Report and Order and Further Notice of Proposed Rulemaking*, 22 FCC Rcd 15817 (2007); Implementation of Infrastructure Sharing Provisions in the Telecommunications Act of 1996, *Report and Order*, 12 FCC Rcd 5470, 5552 (1997). Consistent with precedent, the presumption could be overcome with substantial and persuasive evidence of non-compliance. *See, e.g.*, *Verizon Tel. Cos. v. Madison Square Garden, L.P.*, 26 FCC Rcd 15849, 15862-63 (2011) (citing *Harlem Taxicab Ass’n v. Nemes*, 191 F.2d 459, 461 (D.C. Cir. 1951); *Johnson v. Shalala*, 60 F.3d 1428, 1435 (9th Cir. 1995)).

²² Assuming that the FCC adopts a mitigation safe harbor, those requirements should apply to any licensee that is wholly responsible for any emissions over the general population limit or contributes to emissions that exceed five percent. Under such a structure, each carrier would be responsible for notifying the landowner, providing training, and installing signs. Each carrier meeting that emission threshold would be obligated to coordinate mitigation or take individual responsibility, as Commission regulations require currently for compliance. Section 1.1307(b)(3); *see also RF FNPRM/NOI*, ¶ 193.

²³ *Id.*, ¶ 196.

²⁴ *Id.*, ¶ 194.

areas with higher category occupational limits.²⁵ The Commission should however make this caveat explicit in its final rulemaking. Carriers should be afforded the flexibility to place signs on access points indicating a highest category present at that facility outside that category's area of coverage. If the conditions of the category are already present in the area, then the property owner would have already been informed and any necessary training will still be required.

Finally, the Commission should phase in the implementation of the mitigation requirements over two years given the substantial changes in signs, barriers, and training that are proposed. New signage requirements in particular could necessitate replacing existing signs on thousands of wireless facilities across the country. Implementation of such an effort will be contingent upon many external factors, including coordination of access from property owners, coordination among licensees, contracting sign vendors, and weather, among other factors. During such a transition, facilities will, of course, remain subject to current mitigation requirements, ensuring the maintenance of current safety measures to protect the public.

D. Training Programs Designed to Educate, Inform, and Protect the Public Should Be Administered by a Central Entity

As the Commission's re-examination of its RF rules progresses, and particularly after issuing an order in this proceeding, the Commission should consider administering training programs itself, coordinating with the Occupational Safety and Health Administration on training administration or facilitating centralized training through an association or trade group. The FCC's actions and recommendations clearly indicate the Commission's desire for training

²⁵ *Id.* at 107-08; *see, e.g.*, 47 C.F.R. § 1.1307(b)(2)(iii) (proposed) ("If the boundaries between Category Two and Three are such that placement of both Category Two and Three signs would be in the same location, then the Category Two sign is optional."); 47 C.F.R. § 1.1307(b)(2)(iv) (proposed) ("If the boundaries between Category Three and Four are such that placement of both Category Three and Four signs would be in the same location, then the Category Three sign is optional.").

programs for work practices aimed at ensuring that individuals are fully aware of the potential for exposure and can exercise control over it.²⁶ As wireless communications infrastructure continues to evolve, a centralized training program has the additional benefit of being both easily scalable and updateable. Ultimately, a centralized training program will encourage consistency in the application of any new rules the Commission adopts and can also be cost effective and administratively efficient. PCIA stands ready to assist in such an effort.

II. THE COMMISSION SHOULD CREATE A CONSUMER-CENTRIC GUIDE ON RF EXPOSURE AND INFRASTRUCTURE

The Commission should take this opportunity to update its guidance to the public by creating a consumer-centric guide on RF exposure and infrastructure.²⁷ Issues surrounding RF emissions, unfortunately, continue to be raised in local zoning and other proceedings to delay and, in some cases, thwart infrastructure deployment. Public concern over health effects of RF emissions has served as a source of leverage for individuals opposing communications infrastructure for aesthetic reasons and for opportunists seeking to profit from public fears by convincing local officials to require that industry compensate third parties to monitor RF emissions as a condition of zoning approval.²⁸ Such abuse of the Commission's RF rules serves only to stall deployment, slow investment and economic growth, needlessly increase the cost of

²⁶ *RF FNPRM/NOI*, ¶¶ 76-77, 175, 182-185, 195.

²⁷ *RF FNPRM/NOI*, ¶231.

²⁸ See e.g., Chris D'Angelo, *Residents Rally Against Cell Tower*, THE GARDEN ISLAND (Apr. 22, 2013), http://thegardenisland.com/news/local/residents-rally-against-cell-tower/article_2ae0df70-ab10-11e2-8109-001a4bcf887a.html; Lee Ross, *Cell Tower Proposals Upset Neighbors*, RIO RANCHO OBSERVER (June 23, 2013), http://www.rrobsserver.com/news/local/article_312b459c-dad0-11e2-8011-0019bb2963f4.html; Jessica Bartlett, *Scituate Officials Again Reject Cell Tower at Wampatuck School*, BOSTON.COM (Aug. 21, 2013), http://www.boston.com/yourtown/news/scituate/2013/08/scituate_officials_again_reject_cell_tower_at_elementary_sch.html; see generally PCIA Reply Comments, ET Docket 03-137 (Jan. 1, 2004).

service, and shift citizens' attention from a better understanding of the Commission's leadership role in protecting the public from any RF concerns.

These concerns can be ameliorated with clear and forceful guidance from the Commission. Such guidance should emphasize not only the primacy of the FCC's authority over RF emissions,²⁹ but also that wireless transmitters generally pose no danger to human health from RF exposure and that the Commission's guidelines incorporate wide margins of safety. Through this proceeding, the FCC can assuage the concerns of those seeking a greater understanding of the relationship between public health and communications infrastructure, while limiting situations in which the agency's rules are abused as a mechanism for fear mongering.

While the Commission has provided guidance concerning RF safety over the years through many publications, these sources are either dense and technical (OET Bulletin 65),³⁰ dated (*Local Official's Guide*),³¹ or lack the critical information (*Consumer Guide*)³² needed to

²⁹ 47 U.S.C. § 332(c)(7)(B)(iv); see also *Telespectrum, Inc. v. PSC*, 227 F.3d 414, 424 (6th Cir. 2000) (stating that “no state or local government or instrumentality thereof may regulate the construction of personal wireless 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.’”).

³⁰ OET Bulletin 65, Edition 97-01, August 1997. To illustrate the technicality of OET Bulletin 65, the document is 84 pages in length and contains four pages of definitions and two appendices.

³¹ FCC, *A Local Government Official's Guide to Transmitting Antenna RF Emission Safety: Rules, Procedures, and Practical Guidance* (June 2, 2000) (“*Local Official's Guide*”). In 2000, when the *Local Official's Guide* was last updated, mobile telephony operators used primarily only three types of spectrum licenses to provide service: cellular, broadband PCS, and SMR, while mobile data subscribers totaled a mere “2 to 3 million users,” according to analyst reports. See Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993; Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services, *Sixth Report*, 16 FCC Rcd 13350, 13355, 13396 n.323 (2001). Today, mobile service providers use spectrum in numerous bands, including cellular, broadband PCS, SMR, 700 MHz, AWS-1, BRS/EBS, WCS, and 1670-1675 MHz, and mobile data subscribers exceed 142 million. See Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993; Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services, *Sixteenth Report*, 28 FCC Rcd 3700, 3708, 3960 (2013). As mobile services continue to play a larger role in how Americans communicate, the Commission should update its infrastructure guidance to reflect the increased prevalence of wireless technologies.

address the RF concerns of local jurisdictions and citizens who are not trained in engineering or physics. PCIA therefore recommends that the Commission, within six months of adoption of final rules, plainly make the following key points in a consumer-focused publication of no more than a few pages:

- The FCC has exclusive jurisdiction over RF emissions regarding wireless facilities. In particular, under federal law, state, and local governments may not regulate the placement, construction, and modification of wireless facilities on the basis of the environmental effects of RF emissions if the facilities comply with the FCC regulations governing RF emissions.³³
- Wireless facilities must adhere to the RF emission guidelines established and enforced by the FCC.³⁴ These guidelines incorporate wide margins of safety, and RF emissions from wireless facilities generally are even safer than those limits.³⁵
- Fixed wireless transmitters generally pose no danger to human health from RF exposure, a fact repeated by leading health organizations and agencies in the U.S. and around the world. For example:
 - The World Health Organization has conducted a review of all available studies and concluded that “there is no convincing scientific evidence that the weak RF signals from base stations and wireless networks cause adverse health effects.”³⁶

³² FCC, *Consumer Guide – Human Exposure to Radio Frequency Fields: Guidelines for Cellular and PCS Sites*, <http://transition.fcc.gov/cgb/consumerfacts/rfexposure.pdf> (“Consumer Guide”). For instance, the *Consumer Guide* does not reflect the numerous additional bands utilized today for mobile services, nor does it discuss recent wireless infrastructure developments, such as small cell deployments.

³³ See *supra* note 29.

³⁴ See generally Procedures for Reviewing Requests for Relief From State and Local Regulations Pursuant to Section 332(c)(7)(B)(v) of the Communications Act of 1934; Guidelines for Evaluating the Environmental Effects of Radiofrequency Radiation; Petition for Rulemaking of the Cellular Telecommunications Industry Association Concerning Amendment of the Commission's Rules to Preempt State and Local Regulation of Commercial Mobile Radio Service Transmitting Facilities, *Second Memorandum Opinion and Order and Notice of Proposed Rulemaking*, 12 FCC Rcd 13494 (1997); *Local Official's Guide* at 3 (“[C]ompliance with the FCC's RF guidelines constitutes a *de facto* threshold for obtaining FCC approval to construct or operate a station or transmitter.”).

³⁵ See, e.g., *Human Exposure to Radio Frequency Fields: Guidelines For Cellular and PCS Sites*, <http://www.fcc.gov/cgb/consumerfacts/rfexposure.pdf> (“[T]he FCC's RF exposure guidelines recommend a maximum permissible exposure level to the general public of approximately 580 microwatts per square centimeter. This limit is many times greater than RF levels typically found near the base of cellular or PCS cell site towers or in the vicinity of other, lower-powered cell site transmitters.”); *Local Official's Guide* at 1.

³⁶ See World Health Organization, *Electromagnetic Fields and Public Health: Base Stations and Wireless Technologies* (May 2006), <http://www.who.int/peh-emf/publications/facts/fs304/en/>.

- The U.S. Food and Drug Administration has determined that based on all available evidence, there is “no increased health risk due to radio-frequency (RF) energy.”³⁷
- The FCC has concluded that “[t]here is no scientific evidence to date that proves that wireless phone usage can lead to cancer or a variety of other health effects, including headaches, dizziness or memory loss.”³⁸

The Commission also should make clear that the agency will not tolerate abuse of its RF rules and will take appropriate action to ensure that its RF rules are not used to needlessly slow investment or increase the cost of infrastructure deployment.³⁹ Such efforts are no less required to protect public safety than to comply with the Commission’s statutory obligation to “make available, so far as possible, to all the people of the United States, ... a rapid, efficient, Nation-wide ... wire and radio communication service ... for the purpose[s] of national defense, ... of promoting safety of life and property through the use of wire and radio communication.”⁴⁰

³⁷ U.S. Food and Drug Administration, Consumer Updates: No Evidence Linking Cell Phone Use to Risk of Brain Tumors (May 17, 2010), <http://www.fda.gov/ForConsumers/ConsumerUpdates/ucm212273.htm>.

³⁸ FCC, Office of Engineering and Technology, RF Safety FAQs, <http://www.fcc.gov/oet/rfsafety/rf-faqs.html#Q6>.

³⁹ Federal courts have recognized the primacy of the Commission’s regulation in this area, and have acted to overturn localities’ decisions accordingly. *See, e.g., SPRINTCOM, Inc. v. P.R. Regulations & Permits Admin.*, 553 F. Supp. 2d 87, 93 (D.P.R. 2008) (“A denial based on environmental effects is improper so long as the applicant has complied with all FCC regulations concerning emissions.”).

⁴⁰ 47 U.S.C. § 151.

CONCLUSION

By modernizing the RF exposure rules to allow industry to provide telecommunications services to the public in the most efficient and safe manner possible, the Commission can take another critical step toward meeting “one of the great infrastructure challenges of our time” – increasing broadband deployment throughout the nation.⁴¹ PCIA and its members stand ready to assist the Commission in support of such efforts.

Respectfully submitted,

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⁴¹ Acceleration of Broadband Deployment: Expanding the Reach and Reducing the Cost of Broadband Deployment by Improving Policies Regarding Public Rights of Way and Wireless Facilities Siting, *Notice of Inquiry*, 26 FCC Rcd 5384 (2011).