

current analog (NTSC) antennas to the LCG tower, as do a number of FM radio stations. The proposed common tower will immediately replace two existing towers, and other towers eventually will be consolidated on it. In 1997 and 1998, the six Denver television stations each filed applications with the Commission specifying the LCG tower as the site for their new DTV facilities.

3. In response to the DTV applications, on March 26, 1998, CARE filed a petition asking that the Commission take the following actions: (1) deny renewals to licensees with antennas located at the Lookout Mountain, Colorado, antenna site; (2) not approve any new antennas for the Lookout Mountain site including the DTV applications; and (3) adopt a new limit for human exposure to RF fields of 0.01 microwatts per centimeter squared ($0.01 \mu\text{W}/\text{cm}^2$) for transmitters located in residential areas. In its letter of May 18, 1998, CARE also asked the Commission to require all broadcasters on Lookout Mountain to perform "an environmental impact study pursuant to the National Environmental Policy Act (NEPA)." CARE's requests were based on concerns that the Commission's guidelines for human exposure to RF emissions, adopted in 1996, are not sufficiently protective of human health, and that the Lookout Mountain antennas were exposing nearby residents to unsafe levels of RF energy.

4. In response to CARE's petition, the OET Letter concluded that CARE's original petition did not contain factual evidence that transmitting stations located in the Lookout Mountain area were violating Commission rules. OET also concluded that CARE had not demonstrated that a blanket prohibition on siting of additional transmitters at Lookout Mountain was warranted. In addition, because the Commission's rulemaking concerning changes to the RF exposure limits had long since been concluded, CARE's proposal to establish new Commission exposure limits thousands of times stricter than current limits was judged untimely and without merit. Problems with CARE's interpretation of various measurement study reports and exposure assessment protocols were also documented, including misunderstandings of spatial averaging and of conclusions in the earlier studies conducted in the Lookout Mountain area. However, OET did conclude that more recent evidence of RF levels on Lookout Mountain in excess of the Commission exposure limits indicated that a further investigation of the Lookout Mountain site was justified. Consequently, two subsequent measurement studies were performed at Lookout Mountain by Commission personnel.

5. On October 29, 1998, Commission staff conducted a measurement survey of RF exposure levels in publicly accessible areas at the Lookout Mountain site and determined that certain locations on Lookout Mountain exceeded the RF limits. *See Summary of FCC Survey at Lookout Mountain Antenna Site, November 12, 1998.* OET determined that the relatively high RF levels measured were largely the result of emissions from the antennas of five Denver FM radio stations. The Denver DTV applications could not be granted until the existing RF problem was corrected by the FM stations. At the recommendation of Commission staff, the FM stations subsequently voluntarily reduced their power and took other steps to temporarily eliminate the RF problem on Lookout Mountain. The FM stations also agreed to implement a more permanent solution, pending local approval, including the erection of fencing to prevent public access and exposure in the future. Based upon these actions, on December 2, 1998, and later on February 8, 1999, the staff granted the Denver DTV applications. CARE did not specifically seek reconsideration or review of those actions. Thereafter, OET staff revisited the Lookout Mountain site and confirmed that the remedial measures taken by the FM stations had been implemented and that the Lookout Mountain site was in compliance with RF guidelines. *See Study Report of January 4, 1999.*

6. In response to the OET Letter, CARE filed its Application for Review, dated November 5, 1998. In addition to certain procedural matters that we address below, CARE makes the following claims

and raises the following primary issues: (1) that measurement data indicate non-compliance with Commission exposure limits by broadcasters on Lookout Mountain; (2) that the Commission has violated the National Environmental Policy Act; (3) that Commission environmental impact studies or Environmental Assessments for Lookout Mountain are required and "overdue;" (4) that alternative sites exist for locating new antennas for Denver broadcast stations; (5) that citizens are fearful for their safety and for the value of their homes; (6) that broadcasters should be ordered to "show cause," under Section 312(b) of the Communications Act, as to, why they should not cease and desist from violating Section 1.1310 of the Commission's rules; (7) that the constitutional and "common law" rights of Lookout Mountain residents are being violated; (8) that Commission guidelines for human exposure to RF energy were improperly promulgated and are not strict enough to protect human health; and (9) that the proposed LCG should be denied because of blanketing interference problems on Lookout Mountain and the possible negative impact on wildlife preserves, historical sites and endangered species in the area. We now consider these matters.

II. DISCUSSION

A. Procedural Issues

7. As an initial matter, we note that CARE's Application for Review and its supplementary filings raise a number of issues that were not before the staff when it considered CARE's earlier filings in the OET Letter. For example, in its Application for Review and supplemental filings, CARE raises for the first time the questions of historical preservation, endangered species, and blanketing interference. Section 1.115(c) of the Commission's Rules states that: "[N]o application for review will be granted if it relies on questions of fact or law upon which the designated authority has been afforded no opportunity to pass. 47 C.F.R. § 1.115(c). In this case, CARE has not adequately explained why it was unable to raise these matters in a more timely fashion. We cannot allow a party to "sit back and hope that a decision will be in its favor and, when it isn't, to parry with an offer of more evidence. No judging process in any branch of government could operate efficiently or accurately if such a procedure were allowed." *Colorado Radio Corp. v. FCC*, 118 F. 2d 24, 26 (D.C. Cir. 1941). Therefore, we are not obligated to consider the new matters raised in CARE's filings. However, as indicated below, we have examined the new matters raised by CARE, and we find that CARE has failed to present any relevant evidence or law demonstrating that we should not have granted the DTV applications.³

8. CARE also requests that the Commission seek public comment on its Application for Review. As detailed herein, the Commission has solicited and thoroughly considered the comments of expert health and safety agencies and the public in adopting its radiofrequency radiation health and safety guidelines, in general. Additionally, the Commission has fully considered all the issues raised and briefed by CARE with respect to the siting of communications towers, including, in particular, the proposed LCG tower. It is not the Commission's practice to solicit additional public comment on rulemaking proceedings that have been concluded and license applications that have been granted, and our rules do not require us to do so. CARE provides no reasons why additional public comment would be beneficial. Since there appears to be little or no benefit to be achieved by seeking additional public comment on the matters

³ LCG also points out that CARE's Application for Review exceeds the 25 page limit specified in Section 1.115(f) of the Rules. 47 C.F.R. § 1.115(f). In an effort to be as responsive as possible to the citizens of the Lookout Mountain area, we will permit CARE's filing in excess of the page limitations.

raised by CARE, and the present record is adequate for the Commission to decide the matter, CARE's request that we allow public comment on the Application for Review is denied.⁴

B. Arguments Concerning RF Radiation

9. The results of the Commission studies of the Lookout Mountain have been described in separate reports, dated November 12, 1998, and January 4, 1999, respectively. Non-complying areas were identified as a result of these studies, and recommendations were made for corrective actions to ensure that the Lookout Mountain site was brought into compliance with Commission exposure limits. This was accomplished, and, as noted in the January 4 study report, we are now satisfied that the broadcast stations at Lookout Mountain are in compliance with the Commission exposure guidelines. CARE's claim that it has supplied the information necessary to trigger an Environmental Assessment (EA) of the site, as specified in the Commission's Rules [47 CFR 1.1307(c)], is now moot since the extensive Commission studies and follow-up activities obviate the need for the preparation of an EA.

10. CARE claims that the Commission has violated the National Environmental Policy Act (NEPA) of 1969 (Sections 5 and 6) and that the Commission's guidelines are not sufficiently protective of human health. The Commission adopted new RF exposure guidelines (ET Docket 93-62) following a one-year period for public comment with hundreds of pages of comments being filed with the Commission from industry, trade associations, citizens and expert federal health and safety agencies. *See Guidelines for Evaluating the Environmental Effects of Radiofrequency Radiation*, 11 FCC Rcd 15123 (1997). CARE's collateral attack on the Commission's RF exposure guidelines is not timely and is dismissed.

11. CARE states that the Commission violated its rules implementing NEPA by not requiring a draft EIS and final EIS for licensees on Lookout Mountain. Under the Commission's rules, however, EIS's are only prepared after the Commission reviews the Environmental Assessment (EA) and determines that the proposal "will have a significant effect upon the environment," and such effect cannot be resolved by corrective action. *See* 47 C.F.R. §§1.1308, 1.1314-1.1319. In the present situation corrective actions have already been taken to bring the site into compliance prior to even the preparation of an EA. Therefore, there is no longer an environmental issue with respect to potential violation of Commission RF exposure guidelines requiring the preparation of either an EA or EIS.

12. CARE's allegations that alternative sites should be considered as part of an environmental evaluation are untimely, and, in any case, would only be relevant if a determination had been made that a significant environmental effect, such as RF exposure, currently exists at the site. As explained above, this is not the case. Therefore, there is no need to consider alternative sites because of a potential RF exposure problem. Furthermore, the Commission is not inclined to become involved in application site selection, or local zoning issues as long as federal requirements are met.

13. We find no merit to CARE's claim that area residents' fear of RF radiation and concern over property values are environmental factors that should be considered by the Commission. This claim is

⁴ CARE's additional request for a "full copy of the current internal FCC regulations" used to guide FCC compliance with NEPA, is also denied, since such information is already available in Section 1.1301 *et seq.* of the Commission's rules. 47 C.F.R. § 1.1301 *et seq.*

untimely. Moreover, NEPA requires federal agencies to consider the consequences of their actions on the physical environment; NEPA does not require federal agencies to undertake an analysis of and consider the effects upon residents "psychological health." See *Metropolitan Edison Company v. People Against Nuclear Energy*, 460 U.S. 766 (1983). Moreover, NEPA does not require federal agencies to consider socioeconomic factors, such as diminished property values, where, as here, the record established that the threshold requirement for NEPA analysis -- effect on the physical environment -- has not been met. See *Knaust v. City of Kingston, N.Y.*, No. 96-CV-601 (N.D.N.Y., January 15, 1999) (WESTLAW, Allfeds library); *Olmsted Citizens for a Better Community v. U.S.*, 606 F. Supp. 964 (D. Minn. 1985). Finally, in the absence of a waiver of sovereign immunity, a common law nuisance action will not lie against the Federal Government.

14. CARE's claim that Lookout Mountain broadcasters should "show cause" (Section 10), under Section 312(b) of the Communications Act, as to, "why they should not cease and desist from violating Section 1.1310 of the Commission's rules," is, again, a moot point. Since the compliance problems have been remedied by radio licensees, there is no longer a violation, and such an action is unnecessary.

15. CARE's claim that the Commission's actions, "violate the personal, property and constitutional rights of these residents," is untimely, and, in any case, without merit. This claim is based on an allegation that the Commission had failed ("without due process of law") to consider "current relevant and credible scientific evidence" in making its decisions with respect to RF guideline implementation and protection of human health. As the record in this matter and in the docket adopting new guidelines has amply demonstrated, the Commission has extensively considered all points of view and evidence in arriving at its decisions and conclusions. This same response applies to CARE's allegations that the "common law rights" of residents have been violated by the Commission and that the Commission fails to protect human health.

16. CARE's claim that the Commission did not follow recommendations of federal health and safety agencies in adopting its new RF exposure guidelines is an improper collateral attack on the Commission's rules and is wholly without merit, as explained previously. On the contrary, letters of support for the Commission's guidelines have been received from senior officials of the U.S. Environmental Protection Agency (EPA), the U.S. Food and Drug Administration (FDA), the National Institute for Occupational Safety and Health (NIOSH) and the Occupational Safety and Health Administration (OSHA). These letters are included in the record of ET Docket 93-62 and were extensively relied upon there. EPA has also sent a recent letter to the FCC addressing the situation at Lookout Mountain and reaffirming its support for the Commission's RF guidelines (*see attachment*).⁵ In addition, the Commission continues to cooperate with these other federal agencies and coordinate activities of mutual interest through an on-going radiofrequency inter-agency working group, chaired by the EPA.

17. CARE again claims that the Commission has not considered scientific information on biological effects in developing its guidelines. The Commission conducted the extensive proceeding in ET Docket 93-62, reviewed comments from the public, industry, expert organizations and federal health and safety agencies to determine which scientifically-based guidelines to adopt for use in evaluating human

⁵ Letter, dated April 30, 1999, from Robert Brenner, Acting Deputy Assistant Administrator for Air and Radiation, U.S. Environmental Protection Agency, to Dale N. Hatfield, Chief, Office of Engineering and Technology, Federal Communications Commission.

exposure, and, in fact, considered relevant scientific information on biological effects in adopting its guidelines. Although the Commission stated in that proceeding that it does not have the expertise to develop health and safety standards on its own,⁶ the Commission does have sufficient expertise to analyze and evaluate existing standards and guidelines, and it has utilized that expertise in adopting its current guidelines. The Commission also has the expertise to assess new scientific studies and standards to determine whether the state of the science has changed sufficiently to require a reformulation of its guidelines. It is instructive to note that in the very citation highlighted by CARE to support the claim that biological effects from "low-intensity" exposures are scientifically established ("Vienna Paper on EMF Mobile Phones and Health"), the conclusion is reached that there is *no scientific consensus* about how these effects can be used to develop exposure standards. In other words, the current state of reliable scientific knowledge is reflected in the existing guidelines. Also, it is important to point out that biological "effects" are not the same as biological "hazards." The exposure criteria recommended by both the National Council on Radiation Protection and Measurements (NCRP) and the Institute of Electrical and Electronics Engineers (IEEE), upon which the Commission's guidelines are based, are themselves based on thresholds for known biological effects that are potentially *hazardous*. These existing RF standards and guidelines are designed to protect the public from scientifically established levels for potentially harmful effects linked to exposure to RF fields. In any event, as stated previously, CARE's collateral attack on the Commission's RF guidelines is untimely.

18. CARE claims that the Commission places an unfair burden on citizens for monitoring compliance and cites the situation at Lookout Mountain where Mr. Hislop and Dr. Larson performed their own measurement surveys, the results of which contradicted some of the earlier measurement data obtained there by consultants for LCG. Citizens such as Mr. Hislop and Dr. Larson are to be commended for investing their own time and resources to help ensure compliance. However, this isolated incident, in which Mr. Hislop and Dr. Larson discovered previously undetected areas of non-compliance, does not prove that it is Commission policy to expect citizens to routinely undertake such tasks. In this case, it is our belief that the under-reporting of field levels at certain locations was unintentional on the part of the broadcast licensees and applicants. In a sworn affidavit, Mr. Robert Weller, of Hammett and Edison, Inc., the engineering consulting firm that advised LCG, has described the problems he experienced with certain instrumentation used for his measurements.

19. While it is true that the Commission relies largely on self-certification of RF compliance, willful misrepresentation before the Commission with respect to RF compliance or any other matter is a violation of Section 1.17 of the Rules, and can have serious consequences. If there is evidence of willful misrepresentation by a licensee or applicant to the Commission with respect to RF compliance certification or some other issue, the Commission has the authority to levy forfeitures and/or take other punitive actions including license revocation. We see no basis to conclude that this occurred with respect to the Lookout Mountain site. Those areas which were recently found to be out of compliance with respect to the new exposure guidelines (implemented in October of 1997) were in compliance with the previous guidelines in effect at the time the stations were last required to certify compliance. Furthermore, the measurement problems experienced and sworn to by Mr. Weller do not, without more evidence, support a conclusion that the Lake Cedar Group or other broadcasters intentionally misled the Commission with respect to RF exposure.

⁶ See Report and Order, FCC 96-326, ET Docket 93-62, 11 FCC Rcd 15123 (1997) at para. 28.

20. Finally, CARE alleges that computer modeling alone is not sufficient to guarantee compliance. We fully agree that at complex antenna sites such as Lookout Mountain computer modeling alone may not be sufficient to evaluate compliance. In fact, this is the reason that the Commission has required that actual measurements be made at the site, and that is why the staff twice conducted its own measurement studies. Also, as a condition of the grant of the LCG application, future measurements must be taken to ensure compliance once the new broadcast tower is constructed and operational. In addition, Jefferson County is considering its own monitoring requirements for the area, and we understand and expect that a site coordination committee is being established by the licensees located at Lookout Mountain. Therefore, the implication that the Commission has based, or will base, decisions on "computer modeling alone" is factually inaccurate.

C. Other New Matters

21. In its Application for Review and supplemental filings, CARE raised additional objections to the LCG tower with respect to blanketing interference, facilities sited within an officially-designated wildlife preserve, siting of a facility listed in the National Register of Historic Places, and claims of affects on an endangered species. CARE's objections are untimely, and, in any case, are without merit. While we are not obligated to do so under Section 1.115(c) of the Rules, we will consider each of these matters.

22. With respect to blanketing interference, CARE supplies anecdotal evidence of apparent interference problems experienced by residents in the Lookout Mountain area. The specific cause of this interference, be it a single broadcast station or many, or even whether it is due to a television or radio station, is not apparent from CARE's submission. Quite obviously, the interference is not being caused by the proposed DTV facilities which have not been constructed and are not operational. The fact that existing analog television, AM or FM radio stations may be causing blanketing interference on Lookout Mountain is not a reason to withhold a grant of the Denver DTV applications or prohibit construction of the LCG tower. To the extent that there may be an existing blanketing interference problem, this does not mean that the new DTV tower will contribute to and/or exacerbate the problem. The Commission's blanketing interference rules are only applicable once a station is operating and are not practically considered at the construction permit application stage. See 1998 Biennial Regulatory Review -- Streamlining of Mass Media Applications, Rules and Processes, MM Docket No. 98-43, *Report and Order*, 13 FCC Rcd 23056, 23104 (1998). We will address any actual interference complaints that are a result of the initiation of the new DTV facilities when the television licensees file their license applications. To the extent that it can be demonstrated that the DTV facilities, once operational, are contributing to the ongoing blanketing interference problem, we retain the right to notify the television stations to cease conducting equipment tests, pursuant to Section 73.1610, in accordance with the public interest. See *Weigel Broadcasting Company*, 11 FCC Rcd 17202 (1996). We note that LCG has stated that its members will comply with the Commission's blanketing interference rules, both existing and proposed, and they will assume full responsibility for the adjustment of reasonable complaints arising from the excessively strong signals of their new stations facilities or take other corrective actions. See Amendment of the Commission's Rules to More Effectively Resolve Broadcast Interference, MM Docket No. 96-62, *Notice of Proposed Rulemaking*, 11 FCC Rcd 4750 (1996) (*Blanketing Interference NPRM*).⁷

⁷ To the extent that blanketing interference problems exist and/or continue after the television licensees initiate their new DTV operations, residents in the area may seek relief from the Commission pursuant to Section 73.685(d) of the Commission's Rules, 47 CFR 73.685(d).

23. As for CARE's request that we change our rules to begin examining blanketing interference as an environmental matter under NEPA, we note that CARE has made such a request in comments filed in the blanketing interference rulemaking and, because it would involve a change in our rules, we believe that this matter would best be resolved in that proceeding. We also note that we previously have ruled that RF radiation will not be considered as a blanketing interference issue. See *Blanketing Interference NPRM*, *supra* at ¶ 26.

24. CARE also argues that an EA should have been performed by all licensees on Lookout Mountain for the following reasons: (1) land adjacent to Lookout Mountain is owned by Jefferson County Open Space which has been designated a wildlife preserve and tower construction may have a significant impact that wildlife; (2) certain endangered species reside in the Lookout Mountain area and their habitat is threatened by tower construction; and (3) two facilities listed on the National Register of Historic Places are located near the LCG tower site and may be negatively impacted.

25. From the inception of the Commission's environmental rules, the location of new antennas in antenna farms, or on existing towers or structures, has been deemed environmentally preferable to new construction, has been encouraged, and has been categorically excluded from the environmental processing requirements. See *Implementation of the National Environmental Policy Act of 1969*, 49 FCC 2d 1313, 1320 (1974); see also *First Century Broadcasting, Inc.*, 100 FCC 2d 761 (1985). Note 3 to Section 1.1306 of the Commission's current rules specifically provides that:

The construction of an antenna tower or supporting structure in an established 'antenna farm' (*i.e.*, an area in which similar antenna towers are clustered, whether or not such has been officially designated as an antenna farm), will be categorically excluded unless one or more of the antennas to be mounted on the tower or structure are subject to the provisions of § 1.1307(b) and the additional radiofrequency radiation from that antenna(s) on the new tower or structure would cause human exposure in excess of the applicable health and safety guidelines in § 1.1307(b).

Thus, unless additional RF radiation caused by a new tower, or the cumulative RF radiation due to all towers within an antenna farm, creates exposure levels in excess of the Commission's adopted health and safety guidelines, the construction of the new tower is generally exempt from the Commission's environmental processing rules.

26. CARE has not shown that the proposed tower, otherwise categorically excluded from the Commission's environmental rules, would warrant the filing of an EA under the Commission's safeguard provision contained in 47 C.F.R. §1.1307(c). Section 1.1307(c) provides:

If an interested person alleges that a particular action, otherwise categorically excluded, will have a significant environmental effect, the person shall submit to the Bureau responsible for processing that action a written petition setting forth in detail the reasons justifying or circumstances necessitating environmental consideration in the decision-making process. (See §1.1313). The Bureau shall review the petition and consider the environmental concerns that have been raised. If the Bureau determines that the action may have a significant environmental impact, the Bureau will require the applicant to prepare an EA (*see* §§1.1308 and 1.1311), which will serve as the basis for the determination to proceed with or terminate environmental processing.

CARE has not shown, and the record does not establish, that the proposed LCG tower "may significantly affect the environment," given that the LCG tower will be located in an established antenna farm, an area in which similar towers already exist and have existed for many years. See *First Century Broadcasting, Inc.*, 100 FCC 2d 761, 763-764 (1985). Specifically, the record does not support CARE's contention that the antenna farm portion of Lookout Mountain is an officially designated wildlife area. In fact, CARE admits that the only wildlife preserve in the area, the Jefferson County Open Space, is actually "hundreds of meters" from the proposed LCG tower site. As for endangered species, the record does not demonstrate that the Lookout Mountain area is the critical habitat for such animals as the Preble's meadow jumping mouse, or that such animals even can be found in the Lookout Mountain area. Lookout Mountain is not included on the State of Colorado's list of protection areas for such animals. In addition, with respect to historic preservation, the record does not establish that the construction of the LCG tower would adversely affect either of the two historic sites cited by CARE. The new LCG tower will immediately replace two existing towers and other towers will be replaced when the conversion to DTV is complete. As such, it appears that the LCG tower will have less of an effect on historic sites than the numerous existing tower structures. Therefore, CARE has not demonstrated, and the record does not establish, that the otherwise categorically excluded location for the proposed LCG tower may have a significant environmental effect under section 1.1307(c), which would necessitate the preparation of an EA by the applicants and further environmental review by the Commission.

III. CONCLUSION

27. The foregoing discussion supports our belief that CARE has provided no new evidence that would warrant any further environmental analysis of the Lookout Mountain site with respect to either compliance with the Commission's RF exposure guidelines or electromagnetic interference or a reconsideration of the conclusions expressed in the OET Letter. Furthermore, the new matters raised by CARE do not demonstrate that the OET Letter was in error as a matter of fact or law. Therefore, we deny CARE's Application for Review.

28. ACCORDINGLY, IT IS ORDERED, That pursuant to the authority of Sections 4(i) and (j) and 403 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 154(j) and 403, and Section 1.115 of the Commission's Rules, 47 C.F.R. § 1.115, the Application for Review filed by Canyon Area Residents for the Environment IS DENIED and the letter ruling of October 9, 1998, by the Chief of the Office of Engineering Technology IS AFFIRMED.

FEDERAL COMMUNICATIONS COMMISSION

Magalie Roman Salas
Secretary



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

APR 30 1999

OFFICE OF
AIR AND RADIATION

Mr. Dale Hatfield
Chief, Office of Engineering and Technology
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Dear Mr. Hatfield:

We have recently been contacted by persons involved in the controversy over the digital broadcast tower proposed to be erected on Lookout Mountain in Golden, Colorado. Some of these persons are concerned that your Commission's radio frequency (RF) exposure guidelines have been misinterpreted, and have asked us to clarify the underlying science upon which the guidelines have been based.

The Environmental Protection Agency (EPA) and the Federal Communications Commission (FCC) have worked cooperatively on radio frequency issues for several years. Nowhere is this more apparent than in the case of the final RF exposure guidelines issued by the FCC in 1996. In response to comments submitted by EPA, and other federal health agencies, FCC promulgated more stringent guidelines than originally proposed. Our support for these final guidelines was contained in a letter of July 25, 1996, from the Administrator of EPA to the Chairman of the FCC.

The FCC guidelines expressly take into account thermal effects of RF energy, but do not directly address postulated non-thermal effects, such as those due to chronic exposure. That is the case largely because of the paucity of scientific research on chronic, non-thermal health effects. The information base on non-thermal effects has not changed significantly since the EPA's original comments in 1993 and 1996. A few studies report that at non-thermal levels, long term exposure to RF energy may have biological consequences. The majority of currently available studies suggests, however, that there are no significant non-thermal human health hazards. It therefore continues to be EPA's view that the FCC exposure guidelines adequately protect the public from all scientifically established harms that may result from RF energy fields generated by FCC licensees.

I hope this letter has clarified EPA's position regarding the FCC's RF exposure guidelines.
I look forward to further cooperation between our agencies.

Sincerely yours,

A handwritten signature in black ink that reads "Robert Brenner". The signature is written in a cursive style with a long horizontal flourish at the end.

Robert Brenner
Acting Deputy Assistant Administrator
For Air and Radiation

cc: Kevin K. Groeneweg
Edward W. Hummer, Jr.
Patricia Holloway