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Before the

Federal Communications Commission

Washington D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

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The Secretary
Federal Communications Commission
1919 M. Street N.W.
Room 222
Washington D.C. 20544

Re: **REPLY** Comments pertaining to Notice Of Proposed Rulemaking in **WT Docket No. 97-192** as given in **FCC 97-303**
Enclosed find original and 4 copies to allow distribution to Commissioners

Dear Mr. Secretary:

This letter includes REPLY comments to the Notice of Proposed Rulemaking in WT Docket No. 97-192 described in Public Notice FCC 97-303.

Please place these comments in the official record and distribute as indicated by the Commission.

Respectfully yours, Dated: October 23, 1997

David Fichtenberg

David Fichtenberg
Spokesperson for the Ad-Hoc Association of Parties Concerned About the Federal Communications Commission Radiofrequeny Health and Safety Rules et al.
P.O Box 7577
Olympia, WA 98507-7577 Tel: (206) 722-8306

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Before the

FEDERAL COMMUNICATIONS COMMISSION

Washington, D.C. 20554

In the Matter of Notice of Proposed Rulemaking established to seek comment on proposed procedures for filing and reviewing requests filed pursuant to 47 U.S.C Section 332(c)(7)(B)(iv)-(v)	))))	WT Docket 97-192 described in FCC 97-303

The Secretary
FEDERAL COMMUNICATIONS COMMISSION
1919 M Street N.W. Room 222
Washington, D.C. 20554

To: The Commission

REPLY COMMENTS to
Notice of Proposed Rulemaking in WT Docket 97-192

Submitted by

David Fichtenberg
Spokesperson for the Ad-Hoc Association of Parties Concerned About the Federal Communications Commission Radiofrequency Health and Safety Rules et al.
P.O.Box 7577
Olympia, WA 98507-7577 Tel: (206) 722-8306

Dated: October 23, 1997

To: The Commission

REPLY COMMENTS

On Comments to Notice of Proposed Rulemaking in WT Docket No. 97-197
as described in FCC 97-303 released August 25, 1997

The Ad-Hoc Association of Parties Concerned About the Federal Communications Commission Radiofrequency Health and Safety Rules ("Ad-Hoc Association") appreciates this opportunity to submit these REPLY COMMENTS to comments made by the Concerned Communities and Organizations ("CCO"), dated October 8, 1997, and submitted as comments in this proceeding. The Ad-Hoc Association has members some of whom live near wireless telecommunications facilities, have children which may attend schools near such facilities, use wireless hand held devices as part of their work or are otherwise exposed during their work to wireless telecommunications facilities; accordingly, Ad-Hoc Association members have a direct interest in this proceeding and are concerned that the procedures the Commission will adopt in this rulemaking are appropriate and in the public interest regarding how the Commission will process requests for relief from state or local jurisdiction actions or failures to act, and respectfully submit these reply comments to the comments submitted by CCO.

The Ad-Hoc Association of Parties Concerned About the Federal Communications Commission Radiofrequency Health and Safety Rules ("Ad-Hoc Association") is in agreement with many of the comments made by the Concerned Communities and Organizations ("CCO"), dated October 8, 1997, and submitted in this proceeding. However, for some issues, CCO suggests procedures which would inappropriately preempt local jurisdiction authority and decisions. Furthermore, while no doubt the jurisdictions and organizations comprising CCO are concerned about worker safety matters, these were not formally addressed, even though the points raised by CCO has bearing on the Commission's procedures for processing state and local jurisdiction regulations and other decisions pertaining to radiofrequency ("RF") worker health and safety programs. Points of agreement, points needing further consideration, and points with application to worker safety issues are discussed below.

A. Points of agreement with CCO

A.1. The Commission may not preempt state or local jurisdiction decisions because concerns over RF emissions were raised during proceedings resulting in such decisions. This would violate First Amendment free speech rights, and be contrary to the intent of the priniciple of federalism, the Constitution, statutes, findings in past case histories, and contrary to the intent of the Joint Explanatory Statements to section 704 of the Telecommunications Act of 1996 Public Law 104-104 ("TCA") where from the above it is clear that Section 707 of the TCA never intended that there may be no mention of concerns regarding RF emissions at proceedings pertaining to the placement, construction, and modification of personal wireless service facilities (CCO at 4 through 13, but with the Ad-Hoc Association objecting as noted below).

A.2. The Commission's attempt to remove local authority to monitor radiation from cellular towers and other personal wireless service facility transmitters is inappropriate. The Commission, as well as states and local governments are charged with protecting the public health, safety and welfare. Accordingly, the Commission should not unduly restrict enforcement of the exposure limits set by the Commission - note CCO refers to "emission" limits, but the Commission has issued exposure limits from whatever the source(s) may be; it is assumed CCO meant "exposure" limits. Commercial Mobile Radio Services (CMRS) licensing exemptions differe from operation

RF expousre measurements and local governments need the ability to monitor and measure exposure.

A.3. The Commission has no statutory basis to presume compliance with its RF exposure guidelines. In addition, intended or predicted measurements may not occur in fact due to numerous factors which may change in time. Furthermore, past history provides examples of Commission licensees knowingly violating Commission rules - such as constructing without permission and appropriate lighting, a tower transmission facility in airplane flight path near an airport; other examples include misrepresentation to local governments as determined the by California Public Utilities Commission (see Exhibits #2, 3,4, 5, and details in B.2. below).

A.4. Homeowner associations and other private entitites are not State or local government instrumentalities, and so to construe Section 704 of the TCA as pertaining to the Commission's being able to preempt decisions by such entities would exceed the Commission's authority.

A.5. For a "final action" to be appealable to the Commission under 47 U.S.C. 332(c)(7)(B)(iv) one of the conditions must be that it is an action otherwise would be directly appealable to a local court by a personal wireless services entity adversely affected by such final action or failure to act. Thus, for example, boards of zoning appeals may not be bypassed, since such boards are an inherent part of a local government - whether directly or as a state entity performing a service in behalf of local jurisdictions, and thus are not a part of the State court system, and the Conference Committee Report only allows seeking relief from the Commission when the alternative would be seeking such relief from any independent state court. [Conf. Rep. NO. 458, 104th Congress 2d Sess. page 209 (January 31, 1996).

B. Points made by CCO needing reconsideration:

B.1. Not average, but 'high end' of waiting time distribution should be considered when evaluating "failure to act"

CCO suggests that decisions that take longer than the **average** time to process requests represent the "bare minimum" criteria for even considerating the possibility there may have been 'failure to act'. However, the "average" is **near the center of a distribution of waiting times** to make a decision, so for the Commission to even consider opening a hearing to judge if a State or

local jurisdiction was responsible for a "failure to act" there must be a substantially longer waiting time claimed. The 'bare minimum' criteria for considering whether there may have been a "failure to act" should require the waiting time for the asserted 'failure to act' exeed the waiting times of 95% of similar cases. Please note that in scientific studies evidence of an unusal event typically requires showing the unusual event would be expected less than 5% of the time if the usual processes had been occuring - the Commission should not consider a proceeding to decide if to preempt state or local authority with any less evidence.

B.2 CCO makes excellent points when giving reasons why RF exposure due to emission from carrier transmitters may exceed exposure limits.

The Ad-Hoc presents further examples from California and Pennsylvania to resent further examples indicating why it would be ill advised, and seemingly contrary to what the facts indicate, to presume its licensees will be in compliance, but rather the opposite assumption might even be made.

Some further examples of when regulations were not followed.

Case #1: Bell Atlantic Moble Systems, Inc. ("Bell")

Bell appears to have begun construction on a communications tower and as a result did not follow the regulations

- of the Township of Butler or State of Pennsylvannia, since such construction was done after both a land use permit and building permit had been denied, and the land use permit was still under appeal to the State Supreme court, and,

- of the Federal Aviation Administration ("FAA"), since construction began after the FAA had a report that the project was abandoned - resulting in construction beginning at a site no longer authorized by the FAA for such construction, and

- cf the Federal Communications Commission rules, (i) since when Bell reported cancellation of the Butler Township site, it reported there was no denial of state certification of the site, whereas in fact both applications for a land use permit and building permit were in a status of being denied, and (ii) since when construction had begun, it was after the Commission

had cancelled authorization of the site, thus resulting in construction apparently occuring at an unauthorized site.

Thus, it appears Bell did not follow the regulations of the Township of Butler, State of Pennsylvania, the FAA, and of the Commission.

Details:

(1) Appears to the Ad-Hoc Association to not have followed the regulations of the Township of Butler:

In a Complaint-Civil-Equity suit [#93-50034, filed July 6, 1993, in Court of Common Pleas in Butler County] Butler County, Pennsylvannia ("Complaint") reported that on January 21, 1991 the Butler County Board of Commissioners denied a permit approval to Bell Atlantic for locating a wireless telecommunications facility in Butler County on property owned by the Eagle Printing Company (designated as Location #1 on FCC Radio Station Authorization form 489 attached). A series of appeals followed, including an appeal of Butler County to the Supreme Court of Pennsylvania which it timely filed to appeal a decision of May 12, 1993, in substance, ordering the grant of the permit approval. The appeal of Butler County to the Supreme Court of Pennsylvannia acted as a stay of the order to grant the appeal ("an automatic supersedas of the decision" ordering to grant the appeal). The Complaint also notes that Bell had applied for a building permit to construct a communications tower on the Eagle property, but Butler Township denied such request, for which Bell had taken no appeal (as of date of the Complaint). Nevertheless, the Complaint, states,

"On or about June 23, 1993, Bell Atlantic and/or Eagle Printing commenced construction of the communications tower without a building permit and without an approved development. On or about July 6, 1993, Bell Atlantic and/or Eagle Printing Company through its agent, servants and or employees continued to build the communications tower with neither a building permit nor an approved commercial development plan. The erection of athe communications tower without a building permit and without an approved commercial plan is in direct violation of the ordinance of the Butler Township and the state Muncipalities Planning Code."

Thus, Bell appears to not have followed Butler Township ordinance or state law, in that it began constructing a communications tower after a building permit had been denied, and after the land use permit was denied and continued in a state of denial while an appeal process continued.

(2) Appears to the Ad-Hoc Association to not have followed the regulations of the Federal Communications Commission:

As it is understood the Commission requires its facilities to be constructed only after proper permits are obtained, it appears Commission rules were also not followed.

In addition, it is of interest to note that a Commission report FCC Form 489, Exhibit No. 1 shows that originally that 3 locations were granted under file: 04785-CL-92 ("the File") and issued to Bell, with Location #1 being, it is understood, to be the facility for which a permit was denied to construct on the Eagle Printing property. It is also of interest that in a May 4, 1992, on Commission form 489, Bell appears to have reported cancellation of the Butler County site to the Commission (Exhibit xx); and it is of especial interest that in response to the question,

"Has applicant been denied state certification for the facilities proposed in this application?",

that a representive of Bell answered, "No". However, at this time the denial of Butler County Board of Commissioners of this permit was in effect. Indeed, not only did Butler County Board of Commissioners deny the permit on January 21, 1991, but the Court of Common Pleas of Butler County reaffirmed this denial on May 26, 1992. Thus, it seems without basis that on May 4, 1992 Bell should assert that no denial had occurred when the facts were otherwise.

Furthermore, when Bell did begin construction of its communications tower it did not after it had explicitly reported cancellation of the site to the Commission. Thus, for whatever reasons, it appears that Bell (i) asserted to the Commission in a notice of cancellation, and under penalty of fine and imprisonment, that none of the facilies at the three locations in the File had been denied certification, when in fact this was not so - since both denial of the building permit and land use permit were in effect, and (ii) Bell subsequently did begin construction at a site which it earlier had reported cancellation to the Commission - and so at the time of construction had no authorization for a communications facility at this site.

(3) Appears to the Ad-Hoc Association to not have followed the regulations of the Federal Aviation Administration ("FAA"):

Bell sought construction approval from the Federal Aviation Administration ("FAA") filed January 20, 1990, as evidenced in a December 18, 1991 FAA Project Status Report (see Exhibit xx) which sought from Bell an indication of the present status, since the FAA had not received required notice of any construction, nor had received a request for extension or notice of abandonment. The status report, dated January 10, 1992, then records the project was abandoned.

Hence it appears as if Bell initiated construction in June 1993 after the FAA understood the project had been abandoned. Thus, construction of the communications tower began without proper notifications to the FAA - resulting in an apparent violation of FAA regulations.

Case #2: Assertion that Bell Atlantic Mobile Systems ("BAMS") asserted it was making a filing in behalf of a non-existing partnership

It seems a number of telecommunications companies, including BAMS, reached a settlement on how they would form a partnership to share the market in the Pennsylvania RSA #No. 6. But partners, other than Bell, assert that the partnership had not been formed due to disagreements as to what the terms of the proposed partnership included in comparison to that agreed to in the settlement. Yet the other parties assert that Bell continued to go forward to seek a construction permit gramt "making filings in its own name 'on behalf of a non-existent partnership. This, we submit cannot be countenanced by the FCC." [see FCC file number 10983-CL-P-617-B2-89, filed December 20, 1990].

The above companies to the petition to the Commission also assert that while BAMS never did provide evidence of the existence of the partnership (since it did not exist) by a date specified by the Commission (April 6, 1990), the Commission nevertheless subsequently designated on May 16, 1990, the "Partnership" as tentative selectee for a portion of the RSA in questionfor the seeking requests on behalf of a non-existent entity. Thus, it appears that the

Commission, for some reason believed evidence was provided of the required partnership when it in fact it had not, and no partnership existed.

This example illustrates that not only have there been, for some reasons, appearent inaccuracies of a significant nature given to the Commission, but even when required Commission evidence is lacking, somehow the Commission is prepared to act as if it had such evidence.

Case #3: Los Angeles Cellular Telephone, LACT appeared to the California Public Utilities Commission (CPUC) to have acted in what appeared to the CPUC in ways not in accordance with regualations. An agreement was reached between LACT to pay the CPUC over $4 million. See details in Exhibit 4. In Exhibit 5 details of numerous types of actions by LACT that appeared to the CPUC as possible violations are identified.

Case #4: 16 cellular telephone companies in California were found by the CPUC to appear to have made actions that were possible violations, including what appeared to the CPUC as about 148 incorrect or inconsisent statements to governmental bodies. See Exhibit #5. The Commission is urged to carefully review these cases.

Based on the above the Commission should conisder whether there is a serious problem with its carriers following regulations. Of particular concern is Exhibit #4 and especially Exhibit #5. This is because not a single isolated case is described, but rather what almost appears like a frequent occurence, hopefully less than a majority of the time. The Ad-Hoc Association cannot see significant differences between the California market area and other parts of the country that may have caused the findings reported in the CPUC interim report. Rather, the Commission should consider that it was only the investigative diligence of the CPUC that brought problems to light which are more than likely happenning in many parts of the nation - only state governments may not, for some reason, be as diligent as the CPCU for searching out the types of problems found by the CPUC, but very likley there - since there is no reason to assume the California market is that much different.

B.3 Other reasons to expect out of compliance conditions are:

(1) While the Commission takes note in OET Bulletin 65 that concern should be given to nearby multistory buildings near transmitters, yet the Commission does not include the closeness

of multistory buildings in its criteria of when an environmental assessment is needed, as was requested by the Ad-Hoc Association in its Petition for Reconsideration of the FCC Rule and Order in FCC 96-326 (the Ad-Hoc Petition). Since typically the horizontal beam is the most powerful, upper floors can receive high amounts of exposure, as noted by the Ad-Hoc Association at the Petition page 5,6. Thus, out of compliance conditions may occur without a routine evaluation being made.

(2) By the Commission defining a "facility" as those transmitters that are "owned and operated" by a single entity, this can result in transmitters of many different entities on a single roof-top, and all 'just under the limit' for requiring an evaluation, nevertheless causing an out-of-compliance condition.

(3) The Commission decided that when an evaluation is required of an entity, that it is the responsibility of the entity to know what the total exposure is. However, Commission licensees have reported they are unable to adequately do what the Commision has required of them. For example, AT&T Wireless Services, Inc. ("AT&T") said in its Petition for Reconsideration of FCC 97-326 that, "because of the lack of any central database, identifying licensees of nearby transmitters or their operating power and frequency may be very difficult." [AT&T petition at 7]. Likewise, the Personal Communications Industry Association ("PCIA") states that determining the licensee of nearby facilities will be difficult, and determining their power and frequency will be nearly impossible [PCIA petition for reconsideration of FCC 96-326 at 15]. See both the AT&T and PCIA petitions in Exhibit 7, enclosed.

(4) Moreover, as noted, as antennas are hidden in flagpoles, church steeples, trees, and other large structures, it is further more difficult to identify nearby facilities.

(5) Making direct measurements may dramatically underestimate maximum exposure. This is because moisture in the air,especially rain, can absorb radiofrequency energy, so in order to make the required signal strength reach the outermost edge of the service area, the transmitter power must be increased resulting in nearby structures receiving a much greater exposure.

This is an especial concern for communications workers who may be called upon to repair transmitters in very humid weather conditions.

A report by the National Aeronautics and Space Adinistration (NASA) indicates that up to 10 fold or more power may be needed in very rainy weather [see Exhibit 6 for details]. Using the effects of rain and humid weather, the Commission should require predictions based on measurements in good weather to estimate how much greater exposure might be under the 'worst case' weather conditions, and should certainly approve of States and local jurisdictions so requiring.

(6) The Commission OET Bulletin 65, and 65 A do not adequately address how exposure can increase due to reflections and re-radiation. Therefore, facilites using these sources may find they are in compliance when they are not. Of particular concern are:

- Metal eyeglass frames have been found to act as re-radiators, and under some conditions increase exposure over 100 fold - see article in Exhibit 8-1.

- Also, if persons are by a flat or corner metal surface that is electrically conductive, like aluminum siding on a house, or a baby in a crib in a corner where on the opposite sides of the wall are a refrigerator and large metal storage cabinet. Exposures can increase up to 16 fold or more in such corner setting - for reasonable worst case conditions, this must be considered - see Exhibit 8-2, 8-2b, 8-2c, as there you will see that the Environmental Protection Agency even notes this likely possibility.

- Also, when 2 or more people are close togther, such as when communications workers maintain or install transmitters, then the group can act like an antenna and increase exposure up to 2.5 fold under certain conditions. [See Exhibit 8-3 for details.]

- Also, while some building materials may weaken RF signals, some buildings let almost all of there signal strength in [See Exhibit 9-A]. When walls are outside walls then also very little weakening of signal may occur [See Exhibit 9-B, C]. Indeed, sometimes the exposure level inside is greater than outside due to reflections off walls, mirrors [as noted in exhibits in 8-2], or bending of signals around corners in a home can have the effect of the exposure being the same or more inside as outside (this happened for 30% of the measured points for 900 MHz in a room on an

outside wall. (see Exhibit 9C). Furthermore, the wiring in a house, including that of wire telephones (not wireless) can act as antenna [see Exhibit 9D]. These effects of exposure on people must be determined, or estimated as best as possible (and not ignored because a very good method is not yet available). Effects on those using a wire phone with phone lines near where there are transmitters may be at especial risk. These conditions must be considered.

B.4 Because of all of the above:

- The Bulletin #65 is inadequate. By specifying what methods and formulas will meet the compliance requirement, the Commission is establishing a rule, but only of what is "sufficient" to meet compliance. Because of the above considerations, OET Bulletin 65 is not adequate,and the Commission should modify it. Also, this further justifies States and local jurisdictions making more stringent measurement and prediction criteria.

Given all of the above - the inadequate guidelines in OET Bulletin 65 and the likelihood of companies not following regulations, there is a strong justification for States and local jurisdictions to require their own measurement and prediction schemes.

3. Of especial concern, given the above is the health and safety of communications workers who service this equipment. Given the above there appears a likley high risk that such workers will experience excessive exposure. Moreover, the Commission has said in FCC 97-303 and in the OET Bulletin 65, that if exposure averages are very high over the 6 minute averaging time, then workers can leave the area, say work only 2 minutes if exposures are 3 fold of that allowed for 6 minutes. This is not practical. A worker high in the air or on a roof-top will feel much employment pressure to keep working. Also, moving away and returning creates much climbing which is itself a hazard. The Commission must insist that the 6 minute exposure be based upon continuous exposure.

In any case, given the above problems and instances of lack of compliance, a detailed record keeping system is needed to monitor exposure levels of workers. The regulations of the

Nuclear Regulatory Commission should be used, with appropriate modifications for RF exposure. See Exhibit 10 for examples.

4. CCO simplifies too much when it presumes that all Section 704 does is to let the Commission set exposure limits and to let the States and local jurisdictions assure they are met; it states,

"The Telecommunications Act of 1996 preserved and reaffirmed State and local government's role regarding radio frequency radiaiton from cellular towers. In substance, the Commissin sets the limits for such radiation and State and local governments can regulate cellular towers if emissions exceed the levels prescribed by the Commission."

Rather, States and local jurisdiction decisions may not be preempted by the Commission on the basis of 47 U.S.C. 332(c)(7)(B)(iv)-(v) when such decisions are

(i) not based upon "environmental effects", and 'fear' of adverse health effects is not an environmental effect, as recent courts distinguish between when scientific experts are needed to identify 'environmental effects' v. when the public perspective results in fear, whether based on real environmental effects or not, and resulting loss of property values, and loss of offices or homes for the use for which they were purchased or rented.

(ii) not based upon "environmental effects" over which the Commission does not have expertise or jurisdiction,

(iii) which would violate the Constitution or its amendments- such as a 'taking' under the 5th amendment, or,

(iv) which are based upon protecting the public health and safety during the "operation" of personal wireless service facilities.

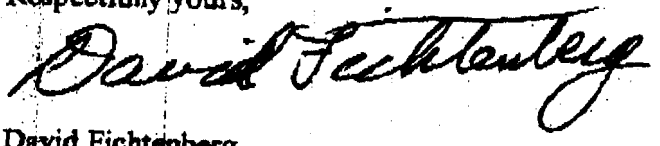
Public fear of adverse health and safety effects due to radio frequency emissions from Commission facilities. This subsection limits, under certain conditions, the seeking of relief from the Commission when a State or local jurisdiction decision is made "on the basis of the **environmental effects** (directly or indirectly) of radio frequency emissions..." Presumably, Congress decided that State and local jurisdictions lacked sufficient scientific expertise decisions

based on "environmental effects" over which the Commission has jurisdiction and scientific expertise may be preempted by the Commission.

C. Other points:

When determining if a State or local jurisdiction violated 47 U.S.C 332(c)(7)(B)(iv) and when hearing the matter as in 47 U.S.C. 332(c)(7)(B)(v), the Commission must only act as in an appeal capacity, since it must be presumed the state or local jurisidiction made proper regulations. It may not retry a case, or retry a legislative procees. This is because , "It is well-established that, as an exercise of the police power, a zoning ordinance is presumed to be constitutionally valid. 'The party attacking the ordinance bears the heavy burden of showing that th ordinance is clearly arbitrary and unreasonable, having no substantial relation to the public health, safety, morals, or general welfare." Clark v. Winnebago County, 817 F 2d.407, 408 (7th Cir. 1987) [citing Goldblatt v. Town of Hempstead, 369 U.S. 590, 596, 82 S.Ct. 987,991, 8 L.Ed.2d 130 (1962); Village of Euclid v. Ambler Realty Co., 272 U.S. 365, 395 47 S.Ct. 114, 121, 71 L..Ed. 303 (1926); Albery v. Reddig, 718 F.2d 245, 251 (7th Cir. 1983)]

Respectfully yours,



David Fichtenberg
Spokesperson for the Ad-Hoc Association of Parties Concerned About the Federal Communications Commission Radiofrequeny Health and Safety Rules et al.
P.O.Box 7577
Olympia, WA 98507-7577 Tel: (206) 722-8306

Dated: October 23, 1997

Exhibit 1

1. Letters from federal agencies

1.1 FCC to Lucinda Grant indicating the FCC does not have expertise to evaluate health studies, and that citizens should send such studies directly to the federal health agencies, as the FCC would not directly ask for them to evaluate such studies.

1.2 Environmental Protection Agency ("EPA")

1.3. Food and Drug Administration ("FDA")

1.4. Occupational Health and Safety Administration ("OSHA")

1.5. National Institute of Occupational Safety and Health ("NIOSH")

FCC

FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

January 23, 1997

Lucinda Grant
Electrical Sensitivity Network
P.O. Box 4146
Prescott, AZ 86302

Dear Ms. Grant:

Your letter of September 19, 1996, to Reed E. Hundt, Chairman of the Federal Communications Commission (FCC), was forwarded to this office for a response. Your letter related the concern you have over the future proliferation of telecommunications services and the effect this may have on individuals who are "electrically sensitive."

The FCC recently adopted guidelines for evaluating human exposure to radiofrequency (RF) emissions from FCC-regulated telecommunications sources (61 Fed. Register 41,006, 1996). These guidelines were based on recommendations made to the FCC by the various agencies of the U.S. Government which are responsible for human health and safety. These agencies include the Environmental Protection Agency (EPA), the Food and Drug Administration (FDA), the National Institute for Occupational Safety and Health and the Occupational Safety and Health Administration. All of these agencies have expressed their support for our guidelines and their appropriateness for protecting human health.

Since the FCC is not a health and safety agency, we have neither the jurisdiction or the resources to investigate the biological effects you describe. We must rely upon the agencies mentioned above for advice and guidance in such areas. Therefore, if you have evidence for harmful biological effects for which our guidelines do not provide protection, it is appropriate that you take this up with the agencies mentioned above, particularly the EPA and the FDA.

I hope that this information will be helpful. If you have any further questions please write this office directly, or you can call our RF Information Line at: (202) 418-2464.

Sincerely,

Robert F. Cleveland, Jr.

Robert F. Cleveland, Jr., Ph.D.
Office of Engineering & Technology
Federal Communications Commission

cc. R. Engelman

EPA

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

JAN 17 1997

OFFICE OF
AIR AND RADIATION

Honorable Reed E. Hundt
Chairman, Federal Communications Commission
1919 M Street, N. W.
Washington, D. C. 20554

Dear Mr. Hundt:

In a letter of July 1, 1996, you requested that the Environmental Protection Agency (EPA) review an approach the Federal Communications Commission (FCC) was considering in developing new radio frequency (RF) exposure guidelines. This approach incorporated elements of guidelines developed by both the American National Standards Institute, the Institute of Electrical and Electronics Engineers, Inc., and the National Council on Radiation Protection and Measurements. In a July 25 letter, Administrator Browner concurred with the FCC approach as adequate to protect public health and indicated that it was consistent with more extensive comments made in November 1993. In regulations issued in August 1996, the FCC finalized this approach based on the recommendations of EPA and other federal health agencies.

Since Administrator Browner's letter in July, some confusion has arisen about EPA's support for the FCC's final RF exposure guidelines. This has occurred as a result of an October 8, 1996, letter from Norbert Hankin of my staff responding to an earlier written request from David Fichtenberg of the State of Washington. In his letter, Mr. Hankin answers several detailed questions about the state of the science on RF exposure. Apparently, Mr. Hankin's response has been incorrectly construed as a departure from the Administrator's position in July.

I would like to reiterate EPA's support of the FCC's final RF exposure guidelines issued in August as providing adequate protection of public health.

I hope that this clarifies any confusion that exists about EPA's support for your guidelines and I look forward to working with your agency in the future.

Sincerely yours,
ORIGINAL SIGNED

MARY D. NICHOLS
Mary D. Nichols
Assistant Administrator
for Air and Radiation

Retyped with minor edits by MPyles:6101:1/16/97

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

JUL 25 1996

THE ADMINISTRATOR

Honorable Reed E. Hundt
Chairman
Federal Communications Commission
1919 M Street, N.W.
Washington, DC 20554

Dear Mr. Hundt:

Thank you for your letter of July 1, 1996, advising me that the Federal Communications Commission (FCC) is completing the process of updating its radio frequency (RF) exposure guidelines, and asking that the Environmental Protection Agency (EPA) review the FCC's approach to developing new guidelines.

As you point out in your letter, EPA commented on a 1993 proposed rule on RF exposure guidelines and recommended that the FCC consider adopting certain features of the National Council on Radiation Protection and Measurements (NCRP) guidelines along with others recommended by the American National Standards Institute (ANSI) and the Institute of Electrical and Electronics Engineers, Inc. (IEEE). The National Institute for Occupational Safety and Health (NIOSH), the Food and Drug Administration (FDA), and the Occupational Safety and Health Administration (OSHA) also commented on this proposal and proposed additional changes.

As a result of these comments, you indicated that you are considering an approach that responds to the recommendations made by the EPA and by the other federal health and safety agencies, incorporates elements from both ANSI/IEEE and NCRP, and includes: 1) adoption of limits for field strength and power density limits based on NCRP recommendations (the ANSI/IEEE and NCRP limits are similar up to 1500 MHz, above which NCRP has different MPE limits); 2) adoption of ANSI/IEEE limits for localized specific absorption rate (SAR) (again, similar to NCRP); 3) deferring adoption of the ANSI/IEEE radiated power exclusion clause pending possible future consideration of a modified version; 4) a categorical exclusion policy for certain transmitters; and 5) endorsement of measurement procedures described in ANSI/IEEE C95.3 and NCRP Report No. 119.

We have reviewed this proposal and the document provided to us through the Interdepartment Radio Advisory Committee, "FCC Draft of July 2, 1996, in the Matter of Guidelines for Evaluating the Environmental Effects of Radiofrequency Radiation". This new approach is consistent with our comments made in 1993 and addresses our concerns about adequate protection of public health. I commend you for taking this action. If there are any questions please refer them to Mary T. Smith, Director, Indoor Environments Division, Office of Radiation and Indoor Air, 202-233-9370.

I appreciate the opportunity to express EPA's support for the FCC proposed plans, and look forward to continuing cooperation between our agencies.

Sincerely,

Carol M. Browner

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

OCT 8 [illegible]

OFFICE OF
AIR AND RADIATION

David Fichtenberg
P.O. Box 7577
Olympia, WA 98507-7577

Dear Mr. Fichtenberg:

Thank you for your E-mail letter of October 2, 1996, that asks for clarification of a statement in the letter (July 25, 1996)from Environmental Protection Agency (EPA) Administrator Carol M. Browner to Federal Communications Commission (FCC) Chairman Reed E. Hundt. You request explanation of the statement, "this new approach is consistent with our comments made in 1993 and addresses our concerns about adequate protection of public health," with questions that pertain to acute thermal exposures, long-term (chronic) nonthermal exposures, and specific absorption rate (SAR).

The aforementioned letter was a response to a Mr. Hundt's request (July 1, 1996) that EPA review the FCC's approach to developing new guidelines. The EPA discussion of the original FCC Notice of Proposed Rulemaking, "Guidelines for Evaluating the Environmental Effects of Radio frequency (RF) Radiation, ET Docket No. 93-62," resulted in recommendations to the FCC (November 9, 1993). One of those recommendations was that the FCC adopt the exposure criteria recommended by the National Council on Radiation Protection and Measurements (NCRP) in NCRP Report No. 86, "Biological Effects and Exposure Criteria for Radio frequency Electromagnetic Fields," instead of the 1992 ANSI/IEEE standard that was originally proposed.

The FCC concluded its rule-making activity in August 1996, and adopted RF radiation exposure limits that are generally based on the NCRP guidelines as was recommended by EPA. In addition the FCC specified (in the introduction to its Report and Order FCC 96-326) that the maximum permissible exposure limits adopted are based on exposure criteria quantified in terms of specific absorption rate, and that the SAR limit is 4 watts per kilogram (W/kg).

EPA was very specific in our 1993 comments regarding the sufficiency of available information (on the health effects of RF radiation) to provide a basis for developing exposure standards. In the context of those comments, the FCC's resulting rule that generally followed the NCRP guidelines, and the FCC's explicit statement that the limits adopted are based on the SAR limit of 4 W/kg, EPA believes that our concerns about adequate protection of public health were addressed by the FCC. The FCC does not claim that their new exposure guidelines provide protection for effects to which the 4W/kg SAR basis does not apply

A key conclusion of EPA's Radio frequency Radiation Conference, April 1993 (see "Summary and Results of the April 26-27, 1993, Radio frequency Radiation Conference." Vol I Analysis of Panel Discussions, EPA Report 402-R-95-009, March 1995) is that "There is sufficient information on thermal exposure/effects on which to base a standard. However, participants generally felt that more information needs to be obtained on nonthermal effects." This is reflected in EPA's November 1993 comments to the FCC. These include the following:

"While studies continue to be published describing biological responses to nonthermal ELF-modulated RF radiation, the effects information is not yet sufficient to be used as a basis for exposure criteria to protect the public against adverse human health effects."

"It is clear that the adverse effect threshold of 4 W/kg is based on acute exposures (measured in minutes or a few hours) that elevate temperature in laboratory animals including nonhuman primates, and not on long-term, low-level (non-thermal) exposure. Only a few chronic exposure studies of laboratory animals and epidemiological studies of human populations have been reported. The majority of these relatively few studies indicate no significant health effects are associated with chronic, low-level exposure to RF radiation. This conclusion is tempered by the results of a small number of reports suggesting potentially adverse health effects (cancer) may exist (...).

"The thesis that the 1992 ANSI/IEEE recommendations are protective of all mechanisms of interaction is unwarranted because the adverse effects level in the 1992 ANSI/IEEE standard is based on a thermal effect."

"While there is general, although not unanimous, agreement that the data base on low-level, long-term is insufficient to provide a basis for standards development, some contemporary guidelines state explicitly that their adverse-effect level is based on an increase in body temperature (NRPB 1993). Furthermore they do not claim that the exposure limits protect against both thermal and nonthermal effects."

With this background established, I will proceed to provide my responses to your other questions.

Q. Is it correct to conclude that the "adequate protection of public health" noted above, refers to "protecting against thermally related effects in humans?"

A. As I have previously noted, while there is sufficient information on thermal exposure/effects on which to base a standard, the data base on low-level, long-term exposure is insufficient to provide a basis for standards to protect the public against adverse human health effects that may result from long-term, nonthermal exposures. Both the NCRP and ANSI/IEEE standards are thermally based, and do not apply to chronic, nonthermal exposure situations. The statement referring to "adequate protection" pertains to thermally related effects.