Cathleen A. Massey
Vice President - External Affairs

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March 21, 1996

William F. Caton
Acting Secretary
Federal Communications Commission
1919 M Street, N.W., MS Code 1170
Washington, D.C. 20544

RE: Ex Parte Presentation
Guidelines for Evaluating the Environmental Effects of Radiofrequency Radiation
ET Docket No. 93-62

Dear Mr. Caton:

Pursuant to the requirements of Sections 1.1200 et seq of the Commission's Rules, you are hereby notified that a meeting occurred today regarding issues raised in the above-referenced docket. In attendance were the following:

AT&T Participants:
Candy Castle, AT&T Wireless Services, Inc.
Cathy Massey, AT&T Wireless Services, Inc.
Frank Mathewson, AT&T Corp.
Ron Petersen, Lucent Technologies

FCC Participant:
David Wye, Wireless Telecommunications Bureau

Attached is a summary of AT&T's views discussed at the meeting as well as copies of letters previously provided to the Commission by Professor Eleanor Adair of Yale University and by Professor Arthur Guy of the University of Washington.

Should there be any questions regarding this matter, please contact me.

Sincerely,

Cathy Massey

Cathleen A. Massey

cc: Meeting Participants

RF Standard

- Pursuant to Section 704(a) of the 1996 Act, no State may regulate the placement, construction and modification of wireless service facilities on the basis of the environmental effects of RF emissions if the facilities comply with FCC regulations on such emissions.

- The Conference Report on this provision makes clear that Congress intended Section 704(a) to prevent State or local governments from basing their land use regulations and decisions "directly or indirectly" on CMRS RF emissions. Congress intended the FCC to be the sole regulator of CMRS RF emissions. This would preclude state or local regulations designed to ensure compliance with Federal standards which are not otherwise required by the Federal rules such as periodic monitoring, fencing, signage, power limitations, etc.

- Pursuant to Section 704(b), the FCC is instructed to complete action in its open RF standards docket item (ET 93-62) by August 6, 1996. The FCC should move quickly to adopt ANSI/IEEE C95.1-1992 as the exclusive Federal RF standard.

    -- the ANSI standard is widely accepted by experts in government (FDA, OSHA, DOD), academia and industry. The standard was produced by a 120 member self-funded committee from over 14 scientific disciplines through a consensus process open to public comment.

    -- The FCC has already adopted the 1992 ANSI standard for PCS services *See* 47 C.F.R. § 24.52. Many cellular carriers are voluntarily complying with the 1992 ANSI standard to ensure safe facilities.

    -- The ANSI standard includes implementation guidance and provides for ongoing interpretation through a consensus process.

- The only other guidelines being discussed, the 1986 NCRP report, does not reflect current scientific literature, was not the product of a broad-based consensus process, and contains no implementation guidance or ongoing interpretation program. The NCRP report also includes a scientifically insupportable limit on low frequency modulation that could imperil emerging wireless digital technologies.

- Unlike the ANSI standard, the NCRP report has not been revised since 1986 and must be updated at taxpayer expense. Indeed, some NCRP scientific committee 89.5 members oppose substitution of the NCRP report for the ANSI standard in this docket because the NCRP report is an incomplete work in progress.

The John B. Pierce Laboratory

Affiliated with Yale University

Center for Research in
Health and the Environment

Established in [illegible]

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March 14, 1996

Mr. William F. Caton
Secretary
Federal Communications Commission
1919 M Street, NW, Room 222
Washington, DC 20554

Re: Ex Parte Presentation Concerning ET Docket No. 93-62 (Guidelines for Evaluating the Environmental Effects of Radiofrequency Radiation)

Dear Mr. Caton:

Please include the attached letter in the record of the above referenced proceeding. Please address any questions concerning this submission to the undersigned.

Sincerely,

Eleanor R. Adair

Eleanor R. Adair, Ph.D.
Fellow
Senior Research Scientist, Yale University

Attachment

cc: Chairman Reed E. Hundt
Commissioner James H. Quello
Commissioner Andrew C. Barrett
Commissioner Susan Ness
Commissioner Rachelle B. Chong
Richard M. Smith, Chief, OET

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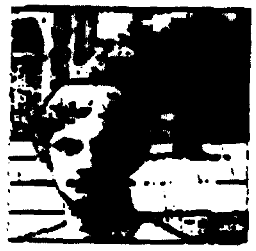
The John B. Pierce Laboratory

Affiliated with Yale University



Center for Research in
Health and the Environment

Established in [illegible]

[illegible]
[illegible] fax

March 14, 1996

Honorable Reed E. Hundt
Chairman
Federal Communications Commission
1919 M Street, NW, Room 814
Washington, DC 20554

Re: Ex Parte Presentation Concerning ET Docket No. 93-62 (Guidelines for Evaluating the Environmental Effects of Radiofrequency Radiation)

Dear Mr. Chairman:

I am greatly disturbed by news that the FCC intends to adopt all or part of the 1986 NCRP Report "Biological Effects and Exposure Criteria for Radiofrequency Electromagnetic Fields", instead of the ANSI/IEEE C95.1-1992 Standard as proposed in the Docket referenced above. As an Advisor to NCRP Scientific Committee 53, I contributed Section 15 to the 1986 NCRP Report No. 86; had I been consulted during development of Section 17, Exposure Criteria, I would have opposed the criteria vigorously on scientific and technical grounds. I currently serve on the newly-formed NCRP Scientific Committee 89-5, charged with revision of the 1986 Report, and can already assure you that this revision will in no way resemble its 1986 predecessor. The exposure criteria will, in fact, closely reflect the more up-to-date ANSI/IEEE C95.1-1992 Standard developed by IEEE SCC28, Subcommittee 4, of which I served as Co-Chairman until late 1995. Also, until recently, all interpretations of the ANSI/IEEE standard were prepared by a SC-4 working group under my Chairmanship. My present role in IEEE standards development is Vice-Chairman of IEEE SCC28.

The NCRP Report No. 86 is not a standard; it is a review of the literature through 1982. The final section contains recommended exposure criteria (based on the ANSI 1982 Standard) that were produced by the 6 committee members working alone. These criteria were criticized at the time the draft report was circulated for review. Today, the Chairman of that committee, A.W. Guy, states that the exposure criteria are obsolete. For example, skin burns can occur at millimeter wave frequencies because of the long averaging time, even though the power density permitted is lower than C95.1; no protective limits on induced and contact currents at low frequencies are provided; and special limits against exposure to modulated fields, based on flimsy evidence, are incorporated in NCRP that appear in no other exposure guideline worldwide. Further, no documentation or instruction on methods for implementing the criteria are

provided. It is no surprise to me that the exposure criteria in NCRP Report No. 86 have never been adopted by any other agency or entity. In my view, it would be a serious mistake if the FCC should do so now.

It is unfortunate that, in the mid-1980s, the U.S. Environmental Protection Agency did not carry through its mandate to generate protective guidance for human exposure to radiofrequency energy. The EPA generated an excellent review of the literature, received voluminous comments to proposed exposure levels published in the Federal Register, and then resigned. The 9 years required for revision of the 1982 ANSI Standard by SC-4 attest to the difficulty of the task of building a science-based consensus exposure standard, but prove it can be done. The resulting IEEE C95.1-1991 Standard, adopted by ANSI in 1992, has also already been adopted by DoE, OSHA, DoD, FDA and other agencies as well as several states, counties, communities, and companies in the United States. This living document, backed by ANSI and the IEEE Standards Board, is continually being interpreted, supplemented, and revised by a large group of scientific and medical experts. Were the FCC to adopt the NCRP 1986 exposure criteria in toto, or create some patchwork hybrid of NCRP and ANSI/IEEE C95.1-1992, utter confusion would result. Who would instruct the users in instrumentation and methodology? Who would interpret unclear sections of the guidelines for the user? Which standard would take precedence, the one already approved by an agency such as the FDA or the new FCC choice? The problems created by such a decision would be enormous.

Based on the information above and my considerable experience in the development of RF exposure guidance for both NCRP and ANSI/IEEE, I urge the FCC to conclude the adoption of the ANSI/IEEE C95.1-1992 Standard as proposed in the 1993 NPRM, presented in ET Docket No. 93-62. That proposed adoption has been overwhelmingly endorsed in comments submitted to the FCC over the last 3 years. Only if the FCC believes there are compelling scientific reasons for doing otherwise, a new NPRM to that effect should be issued that contains details of the new guidance proposed for adoption and sufficient time should be allowed for comments. This decision is far too important to many organizations, agencies and industries for the FCC to ignore the consequences of a convenient or political decision and its impact on public health and safety.

Respectfully Submitted,

Eleanor R. Adair

Eleanor R. Adair, Ph.D.

cc: Commissioner James H. Quello
Commissioner Andrew C. Barrett
Commissioner Susan Ness
Commissioner Rachelle B. Chong
Richard M. Smith, Chief, OET

UNIVERSITY OF WASHINGTON
SEATTLE, WASHINGTON 98195

School of Medicine and College of Engineering
Center for Bioengineering
Bioelectromagnetics Research Laboratory 356490

March 9, 1996

Mr. Thomas P. Stanley, Chief Engineer
Office of Engineering and Technology
Federal Communications Commission
Mail Stop 1300
1919 M Street, N.W.
Washington, DC 20554

Dear Mr. Stanley:

In the matter of *Guidelines for Evaluating the Environmental Effects of Radiofrequency Radiation*, ET Docket No. 93-62, please find enclosed Reply Comments of Arthur W. Guy, Ph.D. Which I prepared.

Thank you in advance for considering my comments.

Sincerely,

Arthur W. Guy
Emeritus Professor

Enclosure

Copy to

R.C. Petersen
E.R. Adair
O.P. Gandhi
J.M. Osepchuk
J. Parisi - IEEE

BB805 University Hospital / Telephone, (206) 543-1071

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Guidelines for Evaluating the	)	
Environmental Effects of	)	ET Docket No. 93-62
Radiofrequency Radiation	)	

REPLY COMMENTS OF ARTHUR W. GUY, PH.D.
EMERITUS PROFESSOR, CENTER FOR BIOENGINEERING
UNIVERSITY OF WASHINGTON

As the Chairman of the subcommittee that developed the ANSI C95.1-1982 radiofrequency exposure standard which formed the basis of subsequent standards, Vice Chairman of the committee that developed the IEEE/ANSI C95.1-1992 standard and the chairman of the committee that developed the 1986 NCRP radiofrequency exposure standard, I would like to present my views on the above matter.

I believe that it would be a mistake for the FCC to adopt the older 1986 NCRP standard at this time considering the fact that newer and more advanced standards have been developed since the publication of the NCRP standard. In fact at this time the NCRP is in the process of updating its old standard by incorporating the results of new research and technology to bring it up to date with, and possibly more advanced than, the more recent standards through the efforts of its newly formed scientific committee, SC 89-5.

Some of these advances in the new IEEE/ANSI C95.1-1992 standards are:

(1) extension of the frequency range to include the entire radiofrequency (rf) communication and broadcast band,

(2) extension of the guidelines to include contact and induced current hazards not covered in the older NCRP standard,

(3) extension of the guidelines to provide protection against well known shock and rf burn hazards,

(4) extension of the guidelines to replace some of the expensive and impractical procedures for validating safe whole-body average and peak SARs during exposure of human tissues to rf fields by significantly less expensive and simpler scientifically based methods. The former methods require specially equipped laboratories staffed by bioelectromagnetics trained scientists and engineers which are in short supply and beyond the reach of all but the largest companies and businesses. The latter methods, on-the-other-hand, can be implemented in the field and at the radiation site through the use of common off-the-shelf survey instrumentation operated by technicians, industrial hygienists, and health physicists who are readily available and accessible by even the smallest companies and organizations,

(5) provides companion tutorial documentation on instrumentation and methodologies for insuring compliance with the standard,

(6) provides a free service for interpretation of the guidelines when situations and questions come up concerning their application, and

(7) the guidelines are under continuous review by over 100 interdisciplinary scientific committee members representing the general public, industry, private and university laboratories, and governmental laboratories for insuring that the standard is based on and compatible with the latest scientific literature and improvements in technology.

In addition to the above many local governments have adopted the standard so that current rf communications and broadcast installations under their jurisdictions are already in compliance with the standard.
If the FCC chooses to adopt the NCRP standard, they will have to devote considerable effort and expense to address the problems that it does not cover and to make it practical to enforce, essentially repeating the work that it took more than 100 scientists to do over a period of a decade.