

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

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JAN 25 1994

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of)
)
Guidelines for Evaluating the)
Environmental Effects of)
Radiofrequency Radiation)

ET Docket No. 93-62

COMMENTS OF GTE

GTE Service Corporation and its
affiliated domestic telephone, equipment
and service companies

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TABLE OF CONTENTS

	<u>Page</u>
SUMMARY	iv
GTE's INTEREST	2
DISCUSSION	3
I. THE RECENT ANSI/IEEE STANDARDS COMPRISE THE CONSENSUS GUIDE FOR EVALUATING HEALTH RISKS POSED BY RADIOFREQUENCY RADIATION	3
A. Commission Reliance On The Consensus Achieved By A Broad Base Of Scientific Experts Is Entirely Appropriate In This Area.....	3
B. The ANSI/IEEE Standards Are Based On Voluminous Scientific Research Conducted Over An Extended Period	5
C. The ANSI/IEEE Standards On RF Radiation Are Based On Extremely Conservative Margins Of Error With Significant Safety Factors	6
II. THE FCC'S REGULATIONS ON THE RF RADIATION OF MOBILE TRANSMITTERS SHOULD BE REVISED TO IMPLEMENT THE NEW GUIDELINES SPECIFIED BY ANSI/IEEE	8
A. Part 15 and Part 22 Mobile Transmitters Operate At Low-Power Levels.....	8
B. Time-Averaging Effects Associated With Part 22 Mobile Stations Provide Additional Assurances That The Standards Will Not Be Exceeded	10
C. In Light Of The Safety Margin Associated With Categorically Excluded Mobile Devices, Recertification Is Unnecessary.....	11

III.	PART 22 BASE STATION TRANSMISSION FACILITIES AND PART 21 MICROWAVE POINT-TO-POINT FACILITIES SHOULD CONTINUE TO BE CATEGORICALLY EXCLUDED FROM ENVIRONMENTAL PROCESSING	12
A.	The Commission Has Appropriately Excluded Part 22 Base Stations From Environmental Processing	12
B.	The Commission Has Appropriately Recognized That The Point-to-Point Microwave Transmission Facilities Used For Telephone And Mobile Operations Warrant A Categorical Exclusion.....	15
C.	Continuing The Land Mobile And Fixed Point-To-Point Microwave Exemptions Is Consistent With The Revised ANSI/IEEE Standard	16
	CONCLUSION.....	17

SUMMARY

GTE provides a number of wireless communications services that play a vital role in today's society. Among other things, GTE's subsidiaries offer cellular services, 800 MHz air-to-ground services, and satellite services using radio spectrum. In addition, GTE uses other radio systems, such as point-to-point microwave links, to support its wireless operations as well as its landline local exchange telephone services. Each of these depends upon radio facilities to provide invaluable services to the public.

GTE's use of wireless technology thus enhances public welfare. GTE's wireless systems offer increased convenience, better productivity, redundancy, and enable greater coverage. Indeed, wireless systems have proven benefits and, in fact, have positively contributed to safety of life and property by affording a critical link to police, fire, and hospitals when landline facilities are unreachable.

GTE supports use of the best available scientifically-based criteria to evaluate potential health effects of exposure to these wireless sources. GTE also believes that in the case of human safety standards, continued surveillance and periodic updating is appropriate, and, in fact, has supported measures like CTIA's Cellular Industry Scientific Advisory Group. This CTIA task force has embarked on a multiyear effort to research, identify, and manage any potential health and safety consequences associated with the use of cellular phones.¹ For these same reasons, GTE concurs with the FCC's initial judgment that currently the most appropriate benchmarks on RF exposure are the 1992

¹ On December 13, 1993, the Scientific Advisory Group ("SAG") announced that it was commissioning its first studies on handheld cellular phones. The SAG has already held three scientific forums to help design these research projects and SAG expects to have its 5 year research agenda ready early this year.

ANSI/IEEE standards. These standards are broad-based, rigorous, and represent a consensus among a vast number of the most prominent scientists and researchers in this area. Given the need for utmost care in developing safety standards, GTE also observes that ANSI/IEEE is highly conservative, offering several layers of safety margins and worst-case assumptions.

As discussed herein, GTE believes that its wireless operations, as well as the industry more generally, have been and continue to be in compliance with the newly proposed RF guidelines. However, due to recent "press scares and media hype,"² consumers have become confused regarding the safety of exposure to RF radiation caused by wireless services. Agency action to formally adopt the new guidelines will foster public understanding by providing an official record regarding the substantial margin of safety as well as providing assurances for consumers of wireless technologies.

² See Separate Statement of Commissioner Ervin S. Duggan at 2 (reprinted with the Notice).

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COMMENTS OF GTE

GTE Service Corporation, on behalf of its affiliated domestic telephone, equipment and service companies ("GTE") hereby submits its comments in response to the above-captioned Notice of Proposed Rulemaking.¹ The Notice proposes to amend the Commission's rules for evaluating the environmental effects of radiofrequency ("RF") radiation to rely upon new RF exposure standards developed by the American National Standards Institute ("ANSI") in association with the Institute of Electrical and Electronic Engineers, Inc. ("IEEE").² As detailed below, GTE fully supports the Commission's proposals as

¹ 8 FCC Rcd 2849 (1993) ("Notice"). The FCC extended the deadline for filing comments to November 12, 1993 and reply comments to December 13, 1993, Order Extending Time for Comments and Reply Comments, DA 93-864 (Aug. 4, 1993), which were later revised to January 11, 1994, and February 10, 1994, respectively, Order Extending Time for Comments and Reply Comments, DA 93-1350 (Nov. 8, 1993), and finally to January 25, 1994, and February 24, 1994, Order Extending Time for Comments and Reply Comments, DA 94-34 (Jan. 10, 1994)

² ANSI/IEEE C95.1-1992, "Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz" (ANSI/IEEE Apr. 27, 1992) (previously issued by IEEE as IEEE C95.1-1991) ("ANSI/IEEE C95.1-1992").

guidelines to ensure that uses of wireless communications systems are consistent with consumer health and well-being.

GTE's INTEREST

GTE provides a wide variety of wireless communications services through its subsidiaries. GTE Mobilnet, in conjunction with Contel Cellular Inc., is currently the nation's second largest cellular carrier. GTE's cellular operations allow subscribers equipped with carphones, transportables, and, increasingly, handheld transceivers, to place calls through the public switched telephone system using a network of low-power frequency re-use "cells." These cells overlap to provide continuous wireless coverage throughout large regions of the United States. Because the system is wireless, terrestrial subscribers can receive or originate important calls anytime or anywhere, maximizing efficiency, broadening lifestyle options, and promoting public health and safety.³

Another GTE subsidiary, GTE Airfone, was the primary originator and currently is the largest operator in the 800 MHz air-to-ground telephone service. This service permits airline passengers to place calls over the public switched terrestrial network while en route.⁴ Passengers utilize low-power cordless transceivers to communicate with a "primary aircraft transmission source," which

³ By ensuring the ubiquitous availability of reliable and redundant communications, these systems affirmatively promote public health and safety. Indeed, recent disasters, such as the San Francisco earthquake, Hurricanes Hugo and Andrew, and the flooding in the Mid-West, have confirmed the wisdom of having ready access to wireless telecommunications networks. Cellular telephones have also been used by, for example, firefighters for internal communications needs when combatting forest fires in the western United States.

⁴ Like cellular services, public 800 MHz air-to-ground communications often provide critical communications. In a number of in-air health emergencies, for example, GTE Airfone services have provided a needed link with terrestrial physicians.

retransmits the signals to a network of terrestrial base stations. GTE Airfone services thus provide a valuable public service by offering telephone services to users who would otherwise be unreachable.

GTE also is an extensive user of microwave point-to-point facilities in support of its cellular, 800 MHz air-to-ground, and landline telephone services. These systems utilize highly focused transmission beams to provide two-way communications capacity. Because the location of the endpoints is generally only constrained by line-of-sight, microwave hops provide a needed alternative to interconnect cell sites and switching centers where wired technologies may be unavailable or uneconomical. For example, in mountainous regions and remote rural areas, microwave facilities are generally more cost effective than landline facilities. Indeed, in some of these areas, laying cable may be physically or economically impossible and microwave links may be the only feasible means of providing service.

DISCUSSION

I. THE RECENT ANSI/IEEE STANDARDS COMPRISE THE CONSENSUS GUIDE FOR EVALUATING HEALTH RISKS POSED BY RADIOFREQUENCY RADIATION

A. Commission Reliance On The Consensus Achieved By A Broad Base Of Scientific Experts Is Entirely Appropriate In This Area

Congress has charged the FCC with promulgating environmental processing rules to ensure that licensing and other regulatory activities do not create adverse health or environmental effects. However, the Commission has admitted that it "is not the expert agency for evaluating the effects of RF

radiation on human health and safety."⁵ In recognition of this fact, the FCC "uses standards and guidelines developed by those with appropriate expertise."⁶

Since 1985, the Commission has relied on the 1982 ANSI RF exposure guidelines in the area of RF radiation bioeffects. As discussed further below, the ANSI standards were initially selected to evaluate RF exposure "because they are scientifically based and widely accepted guidelines that are applicable to the general population as well as to workers."⁷ Elaborating on this decision, the Commission stated:

Although we have neither the expertise nor the jurisdiction to develop our own radiation exposure guidelines, we believe . . . that the Commission does have the expertise and authority to recognize technically sound standards promulgated by reputable and competent organizations such as ANSI.⁸

In 1992, ANSI/IEEE revised its RF exposure guidelines in several important respects. First, it defined categories of "controlled" and "uncontrolled" environments. Second, even though bioeffects had not been detected at a lower threshold, ANSI/IEEE increased by a factor of five their safety margin for uncontrolled environments. Finally, ANSI/IEEE redefined the low-power exclusion in terms of radiated power rather than input power, and added language relating to the distance from the body to the radiating element.

⁵ 8 FCC Rcd at 2850.

⁶ Id.

⁷ Biological Effects of Radiofrequency Radiation, Report and Order, 57 Rad. Reg. 2d (P & F) 1280, 1285 (1985) ("Report and Order").

⁸ Id. at 1286.

The Notice appropriately proposes now to revise the Commission's guidelines based upon the 1982 standards to reflect the 1992 changes. This reliance upon ANSI/IEEE is logical and appropriate. The ANSI/IEEE standard continues to be the most relevant and reliable guideline in this area. Accordingly, replacing the 1982 ANSI guidelines with the most recent recommendations on RF exposure from ANSI/IEEE is sound policy.

B. The ANSI/IEEE Standards Are Based On Voluminous Scientific Research Conducted Over An Extended Period

The most recent ANSI/IEEE standards for human exposure to RF radiation are the result of rigorous and comprehensive work. The ANSI/IEEE RF exposure standards were originally prepared by the Subcommittee IV on Safety Levels and/or Tolerances with Respect to Personnel of the IEEE Standards Coordinating Committee 28. The committee, comprised of over 125 experts active in the field, deliberated over the course of ten years. The standards were finally approved on September 26, 1991 by a sizable majority of the committee, published on April 27, 1992, and subsequently adopted by ANSI on November 18, 1992 after further extensive evaluation.

The long period required to develop these new standards is the result of the broad scope of the ANSI/IEEE project and the rigorous procedures employed. As Dr. F. Kristian Storm, Associate Director of the University of Wisconsin Comprehensive Cancer Center, summarized in a letter to Representative Edward Markey,

[The ANSI/IEEE] standard was derived from detailed, open deliberations of all peer-reviewed scientific publications relating to potential biohazards of any type. The committee members represented the medical and biologic sciences, social sciences, the

government (EPA, FDA, FCC, OSHA), the military and the industry.⁹

Specifically, ANSI/IEEE reviewed over 321 papers for biological, engineering and statistical validity. The ANSI/IEEE Literature Group identified 120 of these papers as meeting defined validation criteria regarding dosimetry, experimental protocol, statistical validity and biological significance. Each of the 120 reports was then subjected to a detailed examination by such diverse groups as the Engineering Validation Group, the Biological Validation Group, the Statistical Evaluation Group, and the Risk Assessment Group. Under the circumstances, the standards truly represent a consensus of broad expertise on the subject of RF exposure.

C. The ANSI/IEEE Standards On RF Radiation Are Based On Extremely Conservative Margins Of Error With Significant Safety Factors

The ANSI/IEEE C95.1-1992 standards incorporate numerous conservative margins of error. As an initial matter, Dr. Storm reports that the 1992 ANSI/IEEE standards contain a tenfold margin of safety for occupational exposure and a fiftyfold margin for the public.¹⁰ In actuality, however, the standards provide a "degree of safety or freedom from hazard for a given human over time and space much greater than is implied by the explicit safety factor . . ."¹¹

⁹ Cellular Business, May 1993, at 30.

¹⁰ Id.

¹¹ IEEE C.95.1-1991 at 29.

This is accomplished by incorporating layers of "conservative assumptions" or implicit contributions toward safety into the guidelines. For example, the 1982 ANSI standards contained the following measures:¹²

- the threshold selected itself (evidence of behavioral disruption) is not a defined hazard; rather it was assumed that chronic exposure under such conditions constitutes a health hazard
- the direct extrapolation from animal to man, arguably, is a conservative assumption given the demonstrably superb thermoregulation of man compared to the reference species
- the selection of the far-field, E-polarized "worst case" exposure as the reference condition (the SAR [specific absorption rate] decreases markedly for other polarizations)
- the incorporation in one contour of the resonance frequencies for all size humans (the SAR falls off markedly for frequencies below resonance)

During the 1991-1992 revisions, the Subcommittee concluded that an additional safety factor was necessary for uncontrolled environments and exposures associated with complicating factors, such as effects from contacting metal objects. Collectively, these factors result in substantial, highly conservative safety margins even under "worst case" conditions.

¹² Id. at 28-29.

II. THE FCC'S REGULATIONS ON THE RF RADIATION OF MOBILE TRANSMITTERS SHOULD BE REVISED TO IMPLEMENT THE NEW GUIDELINES SPECIFIED BY ANSI/IEEE

GTE fully supports the Notice's laudable goal of updating the RF exposure guidelines. Adoption of the new 1992 ANSI/IEEE standards are a logical extension of the Commission's past policy regarding environmental assessment of RF radiation. As discussed below, GTE believes the evidence shows that existing mobile services already comply with ANSI/IEEE C95.1-1992 by a wide margin. Indeed, in 1985, the FCC exempted Part 22 mobile transmitters, such as cellular handsets and primary aircraft transmission sources in the 800 MHz air-to-ground service, from routine environmental evaluation because of their low-power levels and short duty cycles. Under the circumstances, GTE believes adoption and implementation of the new standard can be accomplished easily and rapidly.

A. Part 15 and Part 22 Mobile Transmitters Operate At Low-Power Levels

Both Part 15 and Part 22 mobile transmitters operate at power levels that should not raise concerns under the new ANSI/IEEE standards. Part 22 mobile devices include cellular portables, transportables, vehicular mobiles, and 800 MHz air-to-ground primary aircraft transmission sources. Part 15 mobiles include, among other things, cordless telephones and the cordless GTE Airfone handsets used within the airplane to communicate with the primary aircraft transmission source. The low power levels associated with all of these mobile transmitters is discussed below.

First, due to the exponential decrease of power with distance, recent concerns have been expressed in the media about portable cellular units.

However, as CTIA recently noted, portable cellular phones operate at a maximum of 0.6 Watts, a power level approximately fifteen percent below the proposed FCC safety threshold for the low power exclusion.¹³ Moreover, an additional margin of safety is provided also through the use of adaptive power control:

Portable cellular phones are designed to adjust their power output so they generate only enough power to reach a receiving/transmission station. In a typical urban market sampled by CTIA, cellular phones operate at full power only 5 percent of the time. The rest of the time they operate at a power level of less than half of the maximum 0.6W.¹⁴

Notably, the lowering of the average transmit power referenced by CTIA will continue as carriers, such as GTE, further increase cell density to accommodate growing demand and, accordingly, shorten transmission distances.

Second, 800 MHz air-to-ground ("ATG") handsets are required only to communicate between a passenger's seat and the primary aircraft transmission source in the airplane, a very short distance. Consequently, these handsets are Part 15 devices operating at cordless telephone power levels. In fact, the maximum power of a GTE Airfone cordless unit is 316 μ Watts, approximately 0.0045 percent of the ANSI/IEEE proposed low-power exclusion threshold.

Finally, primary aircraft transmission sources have a severely circumscribed capability for exposing passengers to any significant level of radiation. These airplane mounted transmitters communicate ATG traffic to

¹³ See Statement by Thomas E. Wheeler, President, CTIA, released March 11, 1993 ("CTIA Statement").

¹⁴ Id.

ground stations radiating far away from passengers and outside the metal enclosure of the airplane. Because there is a substantial distance, a number of exterior and interior structures, and cargo between passengers and the primary aircraft transmission source, any signal emanating from the primary aircraft transmission source will be severely attenuated and will not implicate any potential for harmful exposure under ANSI/IEEE C95.1-1992.

B. Time-Averaging Effects Associated With Part 22 Mobile Stations Provide Additional Assurances That The Standards Will Not Be Exceeded

Because the ANSI/IEEE standards are based on time-averaging, the Commission's prior decision estimated duty factors for land-mobile and other transmitters, *i.e.*, the typical fraction of percentage of time that the equipment is actually transmitting, in an effort to accurately evaluate compliance. In that proceeding, however, Motorola pointed out that "at current levels of radiated power . . . there is no need to average over time to reduce exposure since the exposure guidelines would already be met."¹⁵ Thus, the ANSI/IEEE standards implicitly contain yet another built-in safety margin.

Today, cellular transmissions generally last only a very small fraction of the ANSI/IEEE time-averaging interval, and call durations are decreasing yearly. In 1987, AT&T and Motorola determined that "the statistical distribution of holding time for cellular mobile calls is exponential with an average value of 100 seconds."¹⁶ Today, seventy-one percent of all cellular calls last less than 90

¹⁵ Biological Effects of Radiofrequency Radiation, Second Report and Order, 62 Rad. Reg. 2d (P&F) 1086, 1103 (1987) ("Second Report and Order").

¹⁶ Id.

seconds.¹⁷ Under the circumstances, as the FCC previously found, "the levels that will be experienced are in the vast majority of the cases substantially below those permitted by the ANSI standard."¹⁸

C. In Light Of The Safety Margin Associated With Categorically Excluded Mobile Devices, Recertification Is Unnecessary

As discussed above, wireless phones previously exempted from environmental process under Parts 15 and 22 raises no legitimate RF radiation concerns under the new standards the Commission proposes to adopt. Indeed, it appears that existing mobile transmission sources comply with the new guidelines by a wide margin. In light of the evident safety of these radios, no basis exists to impose recertification costs on the industry or the FCC.

Compliance with any requirement of recertification would entail significant and wasteful expenditures for both the industry and the FCC. Sample test measurements would have to be evaluated, superfluous paperwork would be generated and data reaccumulated. Because no public interest reason supports these expenses, recertification appears to be an excessive and wholly unwarranted measure. As the "[c]ategorical exclusion reduces unnecessary regulatory burden and paperwork," GTE believes that this useful tool should be retained.¹⁹

¹⁷ See CTIA Statement.

¹⁸ Second Report and Order at 1088.

¹⁹ Id. at 1092.

III. PART 22 BASE STATION TRANSMISSION FACILITIES AND PART 21 MICROWAVE POINT-TO-POINT FACILITIES SHOULD CONTINUE TO BE CATEGORICALLY EXCLUDED FROM ENVIRONMENTAL PROCESSING

The Commission has previously determined that various factors, such as low power levels, inaccessibility, intermittent usage facilities, and low duty cycles, combine to ensure that Part 22 and Part 21 facilities do not involve a significant RF risk to the human environment. Accordingly, Part 22 base stations and Part 21 microwave facilities were categorically exempted from the environmental processing rules. GTE believes that current data and the public interest support retaining this policy.

A. The Commission Has Appropriately Excluded Part 22 Base Stations From Environmental Processing

In its 1987 Report and Order, the Commission excluded Part 22 fixed transmitters from routine evaluation based on its "belief that the transmitters involved generally do not individually or cumulatively have a significant effect on the quality of the human environment."²⁰ In particular, the FCC stated:

[B]ecause of relatively low operating powers, intermittent use (low duty factors), and relative inaccessibility, there was little evidence that the services identified for exclusion could routinely create situations where the ANSI guidelines would be exceeded.²¹

The factors leading to the Commission's determination are discussed in more detail below.

²⁰ Id. at 1088.

²¹ Id.

Cellular is based on a low-power, frequency re-use design so that cellular base station facilities are inherently lower risk than some other radio facilities.²² The FCC's rules limit cellular base stations to 500 Watts ERP at 500 feet above average terrain ("AAT"), decreasing to 7 Watts ERP at antenna heights of 5,000 feet AAT or more.²³ In fact, the majority of cell-site transmitters operate at ERPs of below 100 Watts. Since power density levels decrease rapidly with the distance from the transmitter, exposure to low-power facilities is generally insignificant a short distance away. Moreover,

[T]he energy from a cell-site antenna is directed toward the horizon in a relatively narrow beam in a vertical plane [so,] [a]s one moves away from the antenna, the power density decreases as the inverse square of the distance, and consequently, the exposure at ground-level in the vicinity of an antenna tower is relatively low compared with the exposure very close to the antenna itself.²⁴

This minimizes the potential for human exposure and "causes time-averaged exposures to the public and in the environment generally to be far below the ANSI guidelines."²⁵

The technical configuration of cellular and other Part 22 facilities itself also limits the potential for human exposure to levels of RF radiation posing a threat to human health and safety. First, tower-based transmitters are generally at

²² 800 MHz ATG base stations are also relatively low-power, with GTE Airfone's base stations required by the FCC to radiate at less than 100 Watts ERP and low power ground stations limited to no more than 1 Watt ERP. 47 C.F.R. § 22.1117 (1992).

²³ 47 C.F.R. § 22.904 (1992).

²⁴ IEEE Entity Position Statement, "Human Exposure to Radiofrequency Fields from Portable and Mobile Telephones and Other Communication Devices" at 3 (IEEE Dec. 1992).

²⁵ Second Report and Order at 1103.

least 30 to 75 meters above ground level,²⁶ minimizing exposure potential even in the immediate vicinity of the facility. Second, rooftop-based transmitters are typically in access-controlled areas. In fact, for safety, reliability, and compliance with the Commission's rules, rooftop security is an important factor in GTE's site planning.²⁷

In addition, cellular and 800 MHz air-to-ground base stations are intermittent use facilities. While such facilities have up to, in a very rare case, 96 discrete channels, it is unlikely that all channels would be in use at any particular moment. In fact, multichannel base stations are generally engineered to be able to accommodate peak load traffic conditions, not average traffic volumes. Since these systems make use of trunking to increase efficiency, most of the channels are inactive most of the time.

Thus, mobile base station transmitters for Part 22 services have minimal potential to exceed the safety thresholds established in the new ANSI/IEEE standards. These transmitters are low-power, inaccessible, and used intermittently.²⁸ For precisely these reasons, the Commission correctly concluded in 1985 that:

²⁶ GTE Airfone tower-based transmitters generally range from 18 to 24 meters above ground level.

²⁷ 47 C.F.R. § 22.117 (1992).

²⁸ See also Second Report and Order at 1090 ("[B]ecause of time-averaging and generally low-duty factors, we believe that the likelihood of the protection guides actually being exceeded is slight, and we do not feel that the evidence supports requiring full-fledged environmental evaluation of each application for a land-mobile license").

With respect to land-mobile base stations and other fixed facilities, we do not believe that environmentally significant exposure is possible due to the relative inaccessibility of such antennas.²⁹

This conclusion should still stand today.

B. The Commission Has Appropriately Recognized That The Point-to-Point Microwave Transmission Facilities Used For Telephone And Mobile Operations Warrant A Categorical Exclusion

For many of the same reasons discussed above, microwave transmitters have an extremely limited potential to exceed SARs specified in either the 1982 or 1992 standards. Recognizing that the inherent design, operating characteristics, and the location of microwave transmitting facilities make them unlikely to cause excessive public exposure to RF radiation, the Commission categorically excluded them from environmental review.

In the 1987 proceeding, many commenters noted that public access to microwave transmitters is limited. MCI Telecommunications Corp. ("MCI") pointed out that the "lowest transmitting antennas are rarely below 100 feet above ground."³⁰ Similarly, Avantek, Inc. explained that "microwave point-to-point antennas are installed in such a way that they are generally inaccessible to the public to facilitate unimpeded transmission."³¹

Microwave facilities are also highly directional and operate at very low-power levels. Nominal operating power of less than 1 watt and antenna gain of 30 to 45 dB is typical. As the Operating Telephone Companies ("OTC")

²⁹ *Id.*

³⁰ *Id.* at 1098.

³¹ *Id.* at 1097.

indicated in the exclusion proceeding, typical exposures at the base and in the vicinity of microwave towers (including rooftop installations) are on the order of 0.001 mW/cm². Similarly, ground-level power densities along the transmission path do not exceed 0.001 mW/cm², far below the ANSI limit of 5 mW/cm².³²

C. Continuing The Land Mobile And Fixed Point-To-Point Microwave Exemptions Is Consistent With The Revised ANSI/IEEE Standard

While the 1992 ANSI/IEEE guidelines are more restrictive than the 1982 standards in the amount of environmental RF exposure permitted, the industry has demonstrated its ability and willingness to comply with the Notice's proposals. Again, the low operating power of Part 22 and Part 21 transmitters renders them incapable of emitting radiation in violation of the new standards under normal and routine conditions of use.

Moreover, the adoption of two sets of exposure recommendations -- controlled versus uncontrolled environments -- should not disrupt the Part 22 and Part 21 exemptions. Regardless of which standard they are measured against, these facilities are well within the established limits. As AT&T explained in its comments in the 1987 proceeding, exposure levels of workers and the public to point-to-point microwave radio and certain land-mobile systems, such as cellular radio, are "typically one-thousand times or more lower than the [1982] ANSI limits . . . "³³ Notwithstanding the stricter standards then, these facilities are still safe in consideration of all of the conservative assumptions on which the 1992 guidelines are based. Simply put, the Commission's decision that these base station facilities do not pose a threat to human health is as valid today as it was in 1987.

³² Id. at 1098.

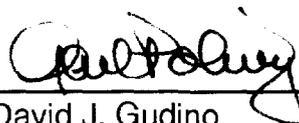
³³ Second Report and Order at 1090.

CONCLUSION

The Commission's Notice appropriately proposes to update its RF exposure standards by relying on the 1992 ANSI/IEEE guidelines. These guidelines represent the reasoned consensus of the scientific and technical community and GTE supports their adoption. Moreover, GTE submits that the Commission's policy of categorically excluding Part 22 and Part 15 handsets and base stations as well as Part 21 microwave point-to-point facilities from the environmental processing rules would be consistent with the new guidelines and the public interest.

Respectfully submitted,

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