



# STATE OF CONNECTICUT

## CONNECTICUT SITING COUNCIL

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Web Site: [www.state.ct.us/csc/index.htm](http://www.state.ct.us/csc/index.htm)

June 5, 2002

Christopher B. Fisher, Esq.  
Cuddy & Feder & Worby LLP  
90 Maple Avenue  
White Plains, NY 10601-5196

RE: **EM-AT&T-079-020523** - AT&T Wireless notice of intent to modify an existing telecommunications facility located at 356 North Main Street, Marlborough, Connecticut.

Dear Attorney Fisher:

At a public meeting held on June 3, 2002, the Connecticut Siting Council (Council) acknowledged your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies.

The proposed modifications are to be implemented as specified here and in your notice dated May 23, 2002. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary by six decibels, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on this tower.

This decision is under the exclusive jurisdiction of the Council. Any additional change to this facility will require explicit notice to this agency pursuant to Regulations of Connecticut State Agencies Section 16-50j-73. Such notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Any deviation from this format may result in the Council implementing enforcement proceedings pursuant to General Statutes § 16-50u including, without limitation, imposition of expenses resulting from such failure and of civil penalties in an amount not less than one thousand dollars per day for each day of construction or operation in material violation.

Thank you for your attention and cooperation.

Very truly yours,

  
Mortimer A. Gelston  
Chairman

MAG/DM/laf

- c: Honorable Howard T. Dean, Jr., First Selectman, Town of Marlborough
- Peter F. Hughes, Zoning Enforcement Officer, Town of Marlborough
- Robert Stanford, Crown Atlantic Company
- Thomas F. Flynn III, Nextel Communications
- Sandy M. Carter, Verizon Wireless
- Julie M. Donaldson, Esq., Hurwitz & Sagarin LLC
- Michele R. Briggs, SNET Mobility LLC
- Stephen J. Humes, Esq., LeBoeuf, Lamb, Greene & MacRae

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BARRY E. LONG

May 29, 2002

VIA FACSIMILE (860-827-2950)

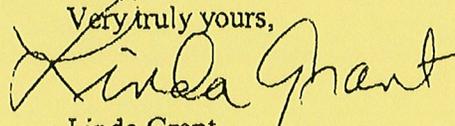
Robert Mercier  
Connecticut Siting Council  
10 Franklin Square  
New Britain, Connecticut 06051

Re: EM-AT&T-079-020523  
(Docket 169)  
Marlborough, Connecticut

Dear Mr. Mercier:

This letter is to confirm that the correct address for the above referenced filing is 45 North Main Street, Marlborough, Connecticut. Should you or the Council require any additional information, please do not hesitate to contact us.

Very truly yours,

  
Linda Grant

cc: Christopher B. Fisher, Esq.

**RECEIVED**  
MAY 23 2002  
CONNECTICUT  
SITING COUNCIL

**NOTICE OF INTENT TO MODIFY AN  
EXISTING TELECOMMUNICATIONS FACILITY AT  
356 NORTH MAIN STREET, MARLBOROUGH, CONNECTICUT**

Pursuant to the Public Utility Environmental Standards Act, Connecticut General Statutes § 16-50g et. seq. ("PUESA"), and Sections 16-50j-72(b) of the Regulations of Connecticut State Agencies adopted pursuant to the PUESA, AT&T Wireless PCS, LLC d/b/a AT&T Wireless ("AT&T Wireless") hereby notifies the Connecticut Siting Council of its intent to modify an existing facility located at 356 North Main Street, Marlborough, Connecticut (the "North Main Street Facility"), owned by Crown Castle International ("Crown") (Docket 169). AT&T Wireless and Crown have agreed to share the use of the North Main Street Facility, as detailed below.

**The North Main Street Facility**

The North Main Street Facility consists of an approximately one hundred sixty (160) foot monopole (the "Tower") and associated equipment currently being used for wireless communications by Nextel, Verizon, Sprint, SNET and VoiceStream and the municipality. A chain link fence surrounds the Tower compound. The current adjacent land uses are predominantly commercial.

**AT&T Wireless' Facility**

As shown on the enclosed plans prepared by URS Corporation, including a site plan and tower elevation of the North Main Street Facility, AT&T Wireless proposes shared use of the Facility by placing antennas on the Tower and equipment cabinets needed to provide personal communications services ("PCS") within the existing fenced compound. AT&T Wireless will install 6 panel antennas at approximately the 137 foot level of the Tower and associated equipment cabinets (2 proposed, 2 future, each 76" H x 30" W x 30" D) on a concrete pad. As evidenced in the letter of structural integrity prepared by Malouf Engineering International Inc., annexed hereto as Exhibit A, AT&T has confirmed that the tower is structurally capable of supporting the addition of AT&T Wireless' antennas.

**AT&T Wireless' Facility Constitutes An Exempt Modification**

The proposed addition of AT&T Wireless' antennas and equipment to the North Main Street Facility constitutes an exempt "modification" of an existing facility as defined in Connecticut General Statutes Section 16-50i(d) and Council regulations promulgated pursuant thereto. Addition of AT&T Wireless' antennas and equipment to the Tower will not result in an increase of the Tower's height nor extend the site boundaries. Further, there will be no increase in noise levels by six (6) decibels or more at the Tower site's boundary. As set forth in an Emissions Report prepared by Nader Soliman, Radio Frequency Engineer, annexed hereto as Exhibit B, the total radio frequency electromagnetic radiation power density at the Tower site's boundary will not

be increased to or above the standard adopted by the Connecticut Department of Environmental Protection as set forth in Section 22a-162 of the Connecticut General Statutes and MPE limits established by the Federal Communications Commission. For all the foregoing reasons, addition of AT&T Wireless' facility to the Tower constitutes an exempt modification which will not have a substantially adverse environmental effect.

**Conclusion**

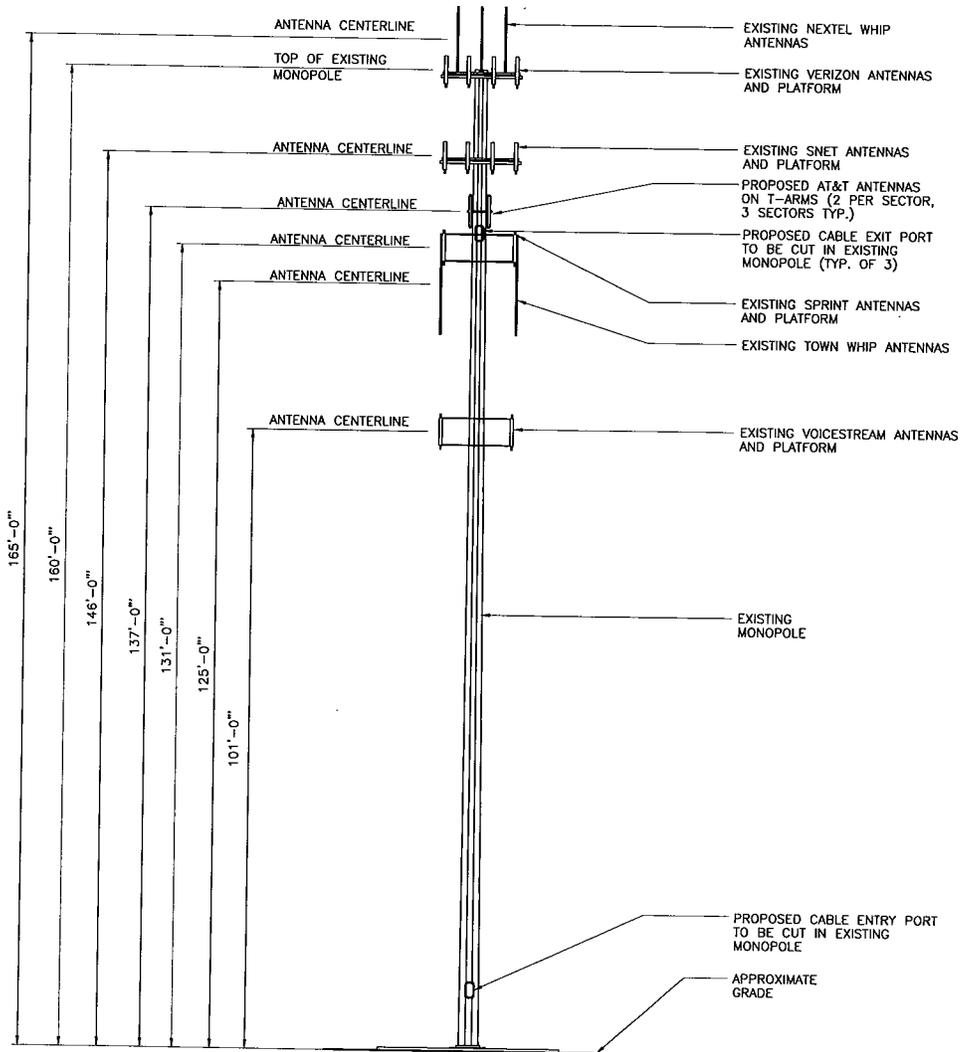
Accordingly, AT&T Wireless requests that the Connecticut Siting Council acknowledge that its proposed modification to the North Main Street Facility meets the Council's exemption criteria.

Respectfully Submitted,



Christopher B. Fisher, Esq.  
On behalf of AT&T Wireless

cc: First Selectman, Town of Marlborough  
Harold Hewett, Bechtel  
Kenneth C. Baldwin, Esq.



1 TOWER ELEVATION  
 SC-2 SCALE: 1" = 30'-0"



**URS**  
 URS CORPORATION AES  
 500 ENTERPRISE DRIVE  
 ROCKY HILL, CT. 06067  
 1-(860)-529-8882



AT&T WIRELESS PCS LLC  
 148 WATER STREET  
 NORWALK, CONNECTICUT 06854

**DRAWING TITLE:** TOWER ELEVATION  
**PROJECT INFORMATION:**  
 MARLBOROUGH CENTRAL  
 24445-3CO-342-SC2-4  
 45 NORTH MAIN  
 MARLBOROUGH, CONNECTICUT

**PROPERTY OWNER:**  
 CROWN CASTLE INTERNATIONAL  
 500 W. CUMMINGS PARK, SUITE 3400  
 WOBURN, MA 01801

SCALE:	AS NOTED	DRAWN BY:	HLM
DATE ISSUED:	05/20/02	CHECKED BY:	JCF
		APPROVED BY:	

ISSUED FOR SITING COUNCIL

JOB NO.	SITE NO.	DRAWING NUMBER	REV.
24445	3CO-342	SC-2	4

URS JOB NO.: F301924.63





April 30, 2002

Mr. Lincoln Erhard,  
**CROWN CASTLE INTERNATIONAL**  
 500 W. CUMMINGS PARK  
 SUITE 6500  
 WOBURN, MA 01801

**SUBJECT:** *Tower Structural Re-Analysis Findings*  
 Existing 160 ft. Monopole Tower  
**MARLBORO SITE #BU806366**  
**AWS MARLBOROUGH CENTRAL SITE # CT342.1**  
 Marlborough, Connecticut  
**MEI Job # 02-0195A**

Dear Mr. Erhard:

As requested, the existing tower located at the **MARLBORO SITE #BU806366**, Marlborough, Connecticut, was re-analyzed in conformance with the ANSI/TIA/EIA 222-F Standard for a basic wind speed of 80 Mph with 0" ice. The re-analysis mainly consisted of revising the elevation of the new proposed AWS panel antennas to elev. 137 ft. (please refer to MEI Project # MEI report # 02-0195 for additional information). The antenna configuration consisted of the following:

ELEVATION	ANTENNAS DESCRIPTION	TENANT	AZIMUTH	TRANSMISSION LINES
ft – AGL	<b>PROPOSED / FUTURE</b>		Orientation	<i>All lines internal</i>
137	(6) Allgon 7250.03 Panel Antennas + Summit 14' Clamp-On Low Profile Platform	AWS	0, 120, 240°	(12) 1 5/8" Dia.
	<b>EXISTING / FUTURE</b>			
Top	Lightning Rod			
Top 165' RC	(3) [REDACTED] Omni Antennas + Standoff mount	Nextel		(3) 1 5/8" Dia.
Top 160' RC	(12) [REDACTED] Panel Antennas + Cell Platform w/ Rails	Verizon	27, 147, 267°	(12) 1 5/8" Dia.
146.	(9) [REDACTED] Panel Antennas + 13' Platform w/ Rails	SNET	23, 143, 263°	(9) 1 5/8" Dia.
131.	(9) [REDACTED] Panel Antennas + 13' Platform w/ Rails	Sprint PCS	90, 180, 270°	(9) 1 5/8" Dia.
131 125' RC	(3) [REDACTED] Whip Antennas – Down	Town		(3) 1 1/4" Dia.
131. 125' RC	(2) [REDACTED] Whip Antennas – Down	Town		(2) 1 1/4" Dia.
101.0	(6) [REDACTED] Panel Antennas + Valmont Platform w/ Rails	VoiceStream	60, 180, 300°	(6) 7/8" Dia.

The tower information used in this analysis is based on updated data as supplied on 04/29/02 via e-mail by Lincoln Erhard of Crown Castle and other data as per previous information available in our records. This existing tower is assumed, for the purpose of this analysis, to have been properly maintained and to be in good condition with no structural defects.

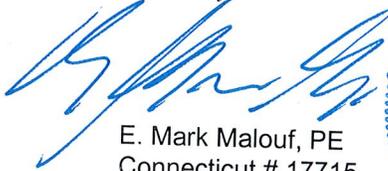
With the revised antenna configuration condition as stated above, the structural analysis results indicated the following:

MEMBERS	RESULTS
POLE SHAFT	All Section of the tower/shaft Are <b>Satisfactory</b> <i>Maximum Stress Ratio = 54.6%</i>
FOUNDATION	Based on Data Supplied – <b>Satisfactory</b>
DEFLECTION	<i>Max. Deflection at 80.0 mph is 25.27 inches</i>

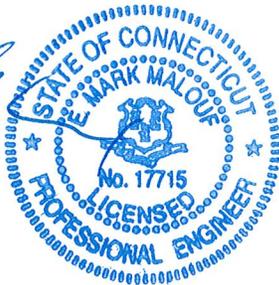
Based on the computer structural analysis results, the existing 160 ft. Monopole Tower does meet the requirements of TIA/EIA 222-F Standard for a basic wind speed of 80 Mph with 0" ice, for the revised antenna configuration considered. The installation of the new AWS Allgon panel antennas at elev. 137 ft is structurally acceptable.

If you have any questions or need further clarification, please call.

Sincerely,



E. Mark Malouf, PE  
Connecticut # 17715



Attachment : Computer Printout

**MALOUF ENGINEERING INTERNATIONAL, INC.**

STRUCTURAL CONSULTANTS



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# **RF Exposure Analysis for Proposed AT&T Wireless Antenna Facility**

SITE ID: 907-007-342

May 21, 2002

**Prepared by AT&T Wireless Services, Inc.  
Nader Soliman RF Engineer**

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## 1. Introduction

This report constitutes an RF exposure analysis for the proposed AT&T Wireless antenna facility to be located at 45 North Main, Marlborough, CT. This analysis uses site-specific engineering data to determine the predicted levels of radio frequency (RF) electromagnetic energy in the vicinity of the proposed facility and compares those levels with the Maximum Permissible Exposure (MPE) limits established by the Federal Communications Commission.

## 2. Site Data

Site Name: <b>Marlborough Central</b>	
Number of simultaneously operating channels	16
Type of antenna	Allgon 7250.03
Power per channel (Watts ERP)	250.0 Watts
Height of antenna (feet AGL)	137.00 feet
Antenna Aperture Length	5 feet

## 3. RF Exposure Prediction

The following equations established by the FCC, in conjunction with the site data, were used to determine the levels of RF electromagnetic energy present in the vicinity of the proposed facility<sup>1</sup>:

$$PowerDensity = \frac{0.64 * N * EIRP(\theta)}{\pi * R^2} (mW/cm^2) \quad Eq. 1-Far-field$$

Where,  $N$ = Number of channels,  $R$ = distance in cm from the RC (Radiation Center) of antenna, and  $EIRP(\theta)$  = The isotropic power expressed in milliwatts in the direction of prediction point. This is the correct equation for antennas which have their gain expressed in dBi, which is the usual case for the PCS bands.

$$PowerDensity = \frac{P_{in} / ch * N * 10^3}{2 * \pi * R * h * \alpha / 360} (mW/cm^2) \quad Eq. 2-Near-field$$

Where  $P_{in}/ch$  = Input power to antenna terminals in watts/ch,  $R$  = distance to center of radiation,  $h$  = aperture height in meters,  $\alpha$  = 3 dB beam-width of horizontal pattern.

<sup>1</sup> RF exposure is measured and predicted in terms of power density in units of milliwatts (mW), a thousandth of a watt, or microwatts ( $\mu$  W), a millionth of a watt, per square centimeter ( $cm^2$ ). Data comparing predictive analysis with on site measurements has demonstrated that power density can be effectively predicted at given locations in the vicinity of a wireless antenna facility.

#### 4. FCC Guidelines for Evaluating the Environmental Effects of RF Radiation

In 1985, the FCC established rules to regulate radio frequency (RF) exposure from FCC licensed antenna facilities. In 1996, the FCC updated these rules, which were further amended in August 1997 by a Second Memorandum Opinion and Order. These new rules represent a consensus of the federal agencies responsible for the protection of public health and the environment, including the Environmental Protection Agency (EPA), the Food and Drug Administration (FDA), the National Institute for Occupational Health and Safety (NIOSH), and the Occupational Safety and Health Administration (OSHA).

Under the laws that govern the delivery of wireless communications services in the United States, as amended by the Telecommunications Act of 1996, the FCC has exclusive jurisdiction over RF emissions from personal wireless antenna facilities, which include cellular, PCS, messaging and aviation sites.<sup>2</sup> Pursuant to its authority under federal law, the FCC has established rules to regulate the safety of emissions from these facilities.

#### 5. Comparison with Standards

Exhibit A shows the levels of RF electromagnetic energy as one moves away from the antenna facility. As shown in Exhibit A, the maximum power density is 0.010403 mW/cm<sup>2</sup> which occurs at 20 feet from the antenna facility. The chart in exhibit A also shows that the power density is only 0.000100 mW/cm<sup>2</sup> at a distance of 4 feet. Table 1 below shows the Maximum Permissible Exposure (MPE) limits established by the FCC. There are different MPE limits for public/uncontrolled and occupational/controlled environments.

*Table 1: Maximum Permissible Exposure limits for RF radiation*

<i>Frequency</i>	<i>Public/Uncontrolled</i>	<i>Occupational/controlled</i>	<i>Maximum power density at Accessible location</i>
Cellular	.580 mW/cm <sup>2</sup>	2.9 mW/cm <sup>2</sup>	0.010403 mW/cm <sup>2</sup>
PCS	1 mW/cm <sup>2</sup>	5 mW/cm <sup>2</sup>	

The maximum power density at the proposed facility represents only 1.47% of the public MPE limit for PCS frequencies.

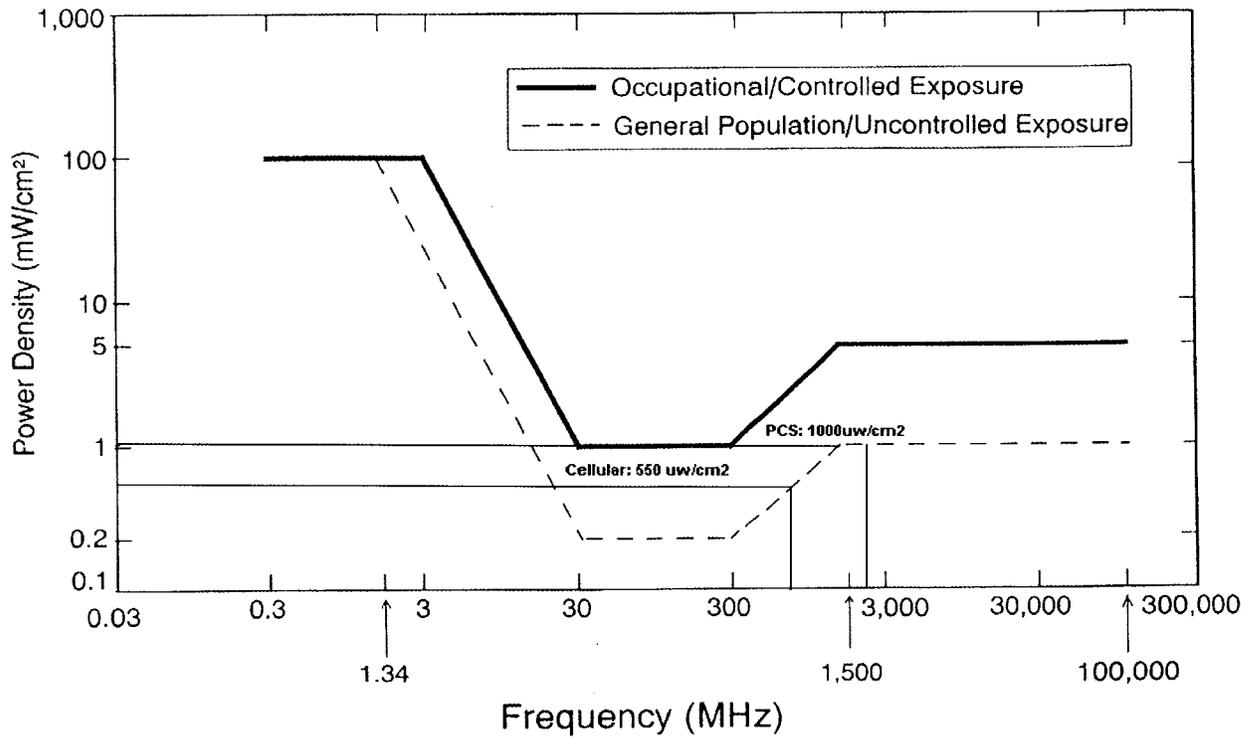
#### 6. Conclusion

This analysis show that the maximum power density in accessible areas at this location is 0.010403 mW/cm<sup>2</sup>, a level of RF energy that is well below the Maximum Permissible Exposure limit established by the FCC.

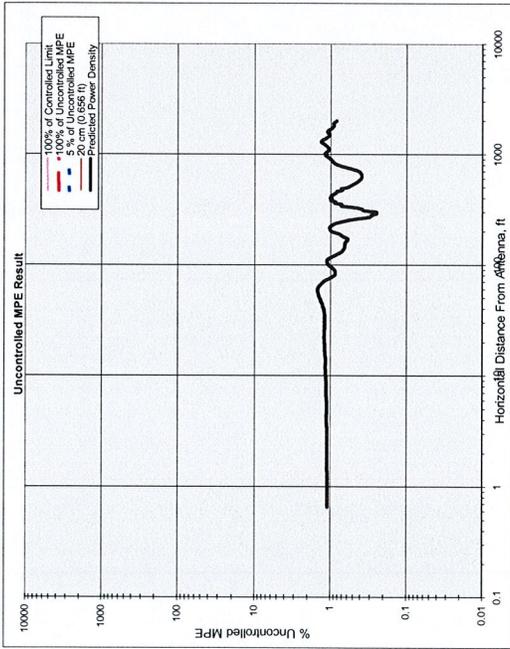
<sup>2</sup> 47 U.S. C. Section 332 ( c ) (7)(B)(iv) states that “[n]o State or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the Commission’s regulations concerning such emissions.”

### 7. FCC Limits for Maximum Permissible Exposure

FCC Limits for Maximum Permissible Exposure (MPE)  
*Plane-wave Equivalent Power Density*



**8. Exhibit A**



Number of Antenna Systems: 8

Meets FCC Controlled Limits for The Antennas Systems.

Meets FCC Uncontrolled Limits for The Antenna Systems.

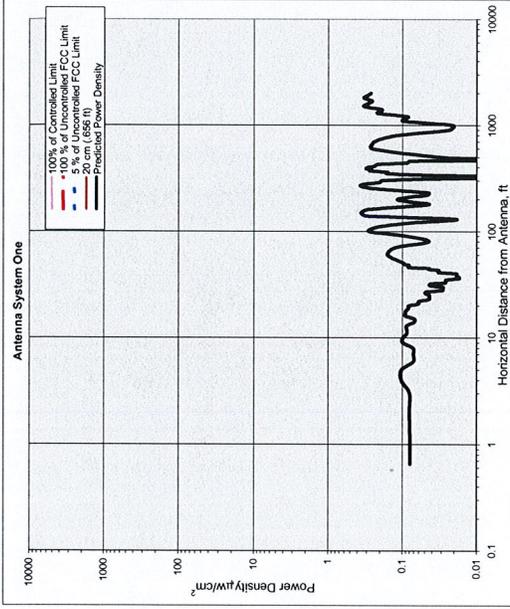
Meets 5% of FCC Uncontrolled Limits for The Antenna Systems.

No Further Maximum Permissible Exposure (MPE) Analysis Required.

Power Density	@Horiz. Dist.
mW/cm <sup>2</sup>	feet
0.010403	20.00
Maximum Power Density =	% of limit
68.10 times lower than the MPE limit for uncontrolled environment	1.47
Composite Power (ERP) =	Watts
77,200.00	

Site ID: 907-007-342  
 Site Name: Marlborough Central  
 Site Location: 45 North Main  
 Marlborough, CT

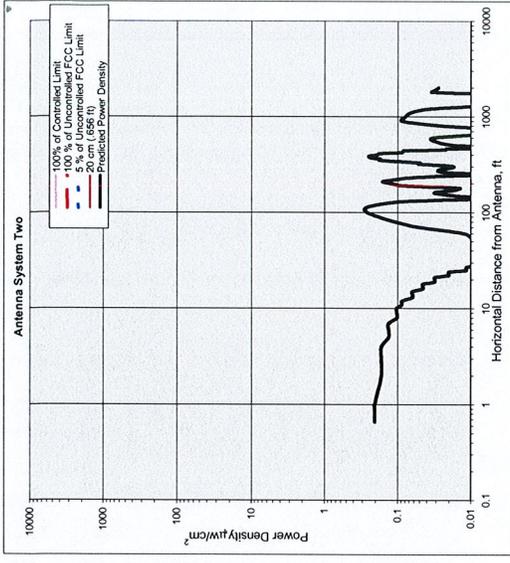
Performed By: Nader Soliman  
 Date: 5/21/2002



Antenna System One

Frequency	Mhz	Value
# of Channels	#	16
Max ERP/Ch	Watts	250.00
Max Pwr/Ch Into Ant.	Watts	5.86
(Center of Radiator)	feet	137.00
Calculation Point	feet	0.00
(above ground or		0.00
roof surface)		0.00
Antenna Model No.		Alligon 7250.03
Max Ant Gain	dBd	16.30
Down tilt	degrees	0.00
Miscellaneous Att.	dB	0.00
Height of aperture	feet	5.11
Ant HBW	degrees	65.00
Distance to Ant <sub>horiz</sub>	feet	134.45
WOS?	Y/N?	n

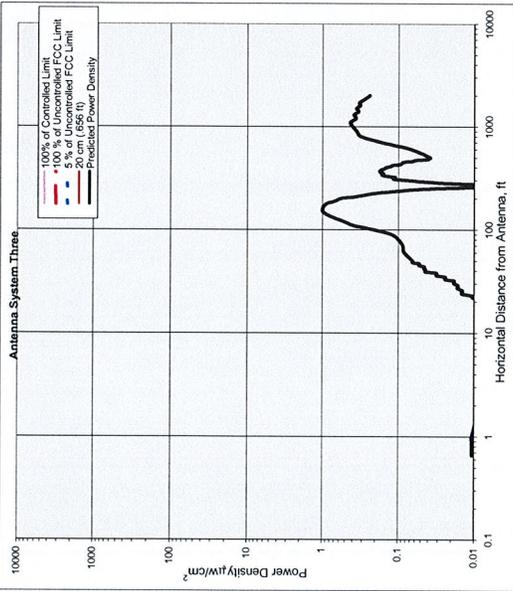
Ant System ONE Owner: AT&T  
 Sector: 3  
 Azimuth: 0/120/240



Antenna System Two

Frequency	Mhz	Value
# of Channels	#	16
Max ERP/Ch	Watts	250.00
Max Pwr/Ch Into Ant.	Watts	25.00
(Center of Radiator)	feet	165.00
Calculation Point	feet	0.00
(above ground or		0.00
roof surface)		0.00
Antenna Model No.		DB810K-XC
Max Ant Gain	dBd	10.00
Down tilt	degrees	0.00
Miscellaneous Att.	dB	0.00
Height of aperture	feet	14.50
Ant HBW	degrees	360.00
Distance to Ant <sub>horiz</sub>	feet	157.75
WOS?	Y/N?	n

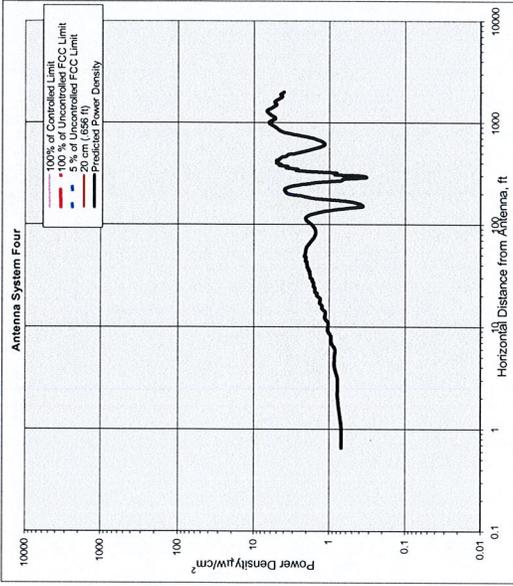
Ant System TWO Owner: Nextel  
 Sector: 3  
 Azimuth: 0/120/140



Antenna System Three

Parameter	units	Value
Frequency	MHz	880.00
# of Channels	#	16
Max ERP/Ch	Watts	250.00
Max Pwr/Ch Into Ant. (Center of Radiator)	Watts	15.77
Calculation Point (above ground or roof surface)	feet	160.00
Calculation Point (above ground or roof surface)	feet	0.00
Calculation Point (above ground or roof surface)	feet	0.00
Antenna Model No.		DB844H90-XY
Max Ant Gain	dBd	12.00
Down tilt	degrees	0.00
Miscellaneous Att.	dB	0.00
Height of aperture	feet	4.00
Ant. HBW	degrees	90.00
Distance to Ant <sub>Location</sub>	feet	158.00
WOS?	Y/N?	n

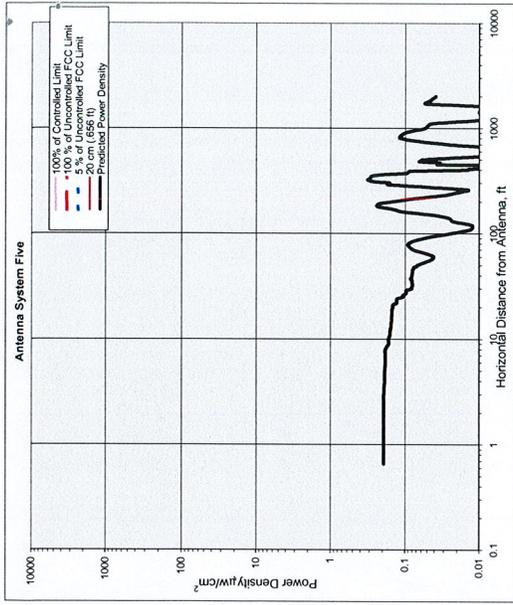
Ant System Three Owner: Verizon  
 Sector: 3  
 Azimuth: 271/47/267



Antenna System Four

Parameter	units	Value
Frequency	MHz	880.00
# of Channels	#	216
Max ERP/Ch	Watts	250.00
Max Pwr/Ch Into Ant. (Center of Radiator)	Watts	9.95
Calculation Point (above ground or roof surface)	feet	146.00
Calculation Point (above ground or roof surface)	feet	0.00
Calculation Point (above ground or roof surface)	feet	0.00
Antenna Model No.		DB844H80
Max Ant Gain	dBd	14.00
Down tilt	degrees	0.00
Miscellaneous Att.	dB	0.00
Height of aperture	feet	4.00
Ant. HBW	degrees	80.00
Distance to Ant <sub>Location</sub>	feet	144.00
WOS?	Y/N?	n

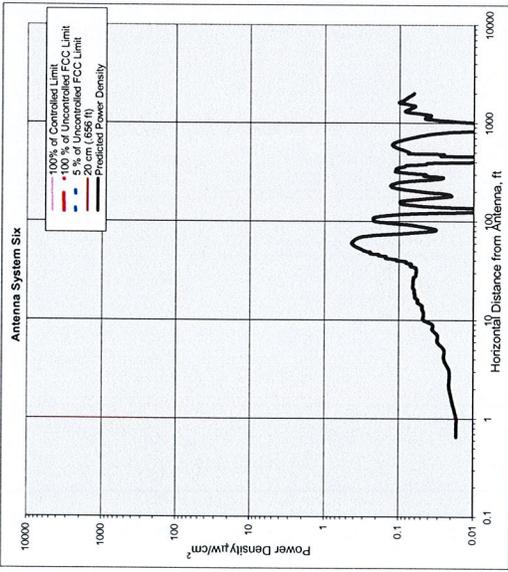
Ant System Four Owner: SNET  
 Sector: 1  
 Azimuth: 23/143/263



Antenna System Five

Parameter	units	Value
Frequency	MHz	1950.00
# of Channels	#	16
Max ERP/Ch	Watts	250.00
Max Pwr/Ch Into Ant. (Center of Radiator)	Watts	7.73
Calculation Point (above ground or roof surface)	feet	131.00
Calculation Point (above ground or roof surface)	feet	0.00
Calculation Point (above ground or roof surface)	feet	0.00
Antenna Model No.		DB980G90E-M
Max Ant Gain	dBd	15.10
Down tilt	degrees	0.00
Miscellaneous Att.	dB	0.00
Height of aperture	feet	5.00
Ant. HBW	degrees	90.00
Distance to Ant <sub>Location</sub>	feet	128.50
WOS?	Y/N?	n

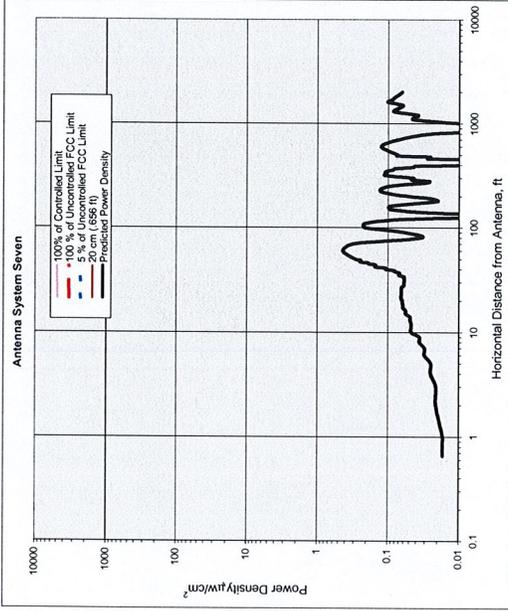
Ant System Five Owner: Sprint PCS  
 Sector: 3  
 Azimuth: 90/180/270



Antenna System Six

Frequency	units	Value
33.00	MHz	33.00
# of Channels	#	4
Max ERP/Ch	Watts	400.00
Max Pwr/Ch into Ant. (Center of Radiator)	Watts	59.16
Calculation Point (above ground or roof surface)	feet	125.00
Antenna Model No.		0.00
Max Ant Gain	dBd	0.00
Down tilt	degrees	0.00
Miscellaneous Att.	dB	0.00
Height of aperture	feet	9.40
Ant. HBW	degrees	360.00
Distance to Ant <sub>bottom</sub>	feet	120.30
WOS?	Y/N?	n

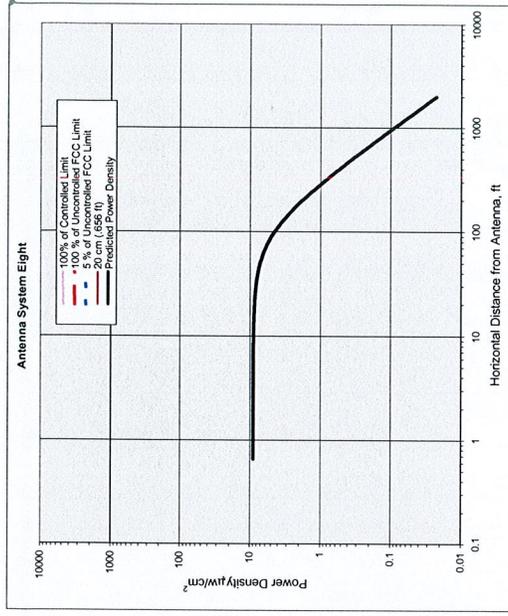
Ant System SIX Owner: Town  
Sector: 1  
Azimuth: 360



Antenna System Seven

Frequency	units	Value
33.00	MHz	33.00
# of Channels	#	4
Max ERP/Ch	Watts	400.00
Max Pwr/Ch into Ant. (Center of Radiator)	Watts	59.16
Calculation Point (above ground or roof surface)	feet	125.00
Antenna Model No.		0.00
Max Ant Gain	dBd	0.00
Down tilt	degrees	0.00
Miscellaneous Att.	dB	0.00
Height of aperture	feet	9.40
Ant. HBW	degrees	360.00
Distance to Ant <sub>bottom</sub>	feet	120.30
WOS?	Y/N?	n

Ant System SEVEN Owner: Town  
Sector: 1  
Azimuth: 360



Antenna System Eight

Frequency	units	Value
1865.20	MHz	1865.20
# of Channels	#	16
Max ERP/Ch	Watts	250.00
Max Pwr/Ch into Ant. (Center of Radiator)	Watts	15.77
Calculation Point (above ground or roof surface)	feet	101.00
Antenna Model No.		0.00
Max Ant Gain	dBd	0.00
Down tilt	degrees	0.00
Miscellaneous Att.	dB	0.00
Height of aperture	feet	4.00
Ant. HBW	degrees	90.00
Distance to Ant <sub>bottom</sub>	feet	99.00
WOS?	Y/N?	0.00

Ant System Eight Owner: VoiceStream  
Sector: 3  
Azimuth: 60/180/300

## 9. For Further Information

Additional information about the environmental impact of RF energy from personal wireless antenna facilities can be obtained from the Federal Communications Commission:

Dr. Robert Cleveland  
Federal Communications Commission  
Office of Engineering and Technology  
Washington, DC 20554

RF Safety Program: 202-418-2464  
Internet address: [rfsafety@fcc.gov](mailto:rfsafety@fcc.gov)  
RF Safety Web Site: [www.fcc.gov/oet/rfsafety](http://www.fcc.gov/oet/rfsafety)

## 10. References

- [1] The Communications Act of 1934, as amended by the Telecommunications Act of 1996, 47 U.S.C. Section 332 (c)(7)(B)(iv).
- [2] *Guidelines for Evaluating the Environmental Effects of Radio frequency Radiation*, Notice of Proposed Rulemaking, ET Docket 93-62, 8 FCC Rcd 2849 (1993).
- [3] *Guidelines for Evaluating the Environmental Effects of Radio frequency Radiation*, Report and Order, ET Docket 93-62, FCC 96-326, adopted August 1, 1996. 61 Federal Register 41006 (1996).
- [4] *Guidelines for Evaluating the Environmental Effects of Radio frequency Radiation*, Second Memorandum Opinion and Order, ET Docket 93-62, adopted August 25, 1997.
- [5] *Evaluating Compliance with FCC Guidelines for Human Exposure to Radio frequency Electromagnetic Fields*, OET Bulletin 65, August, 1997.