

STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051 Phone: (860) 827-2935 Fax: (860) 827-2950 E-Mail: siting.council@po.state.ct.us Web Site: www.state.ct.us/csc/index.htm

February 20, 2002

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

RE:

EM-AT&T-097-107-117-130-148-156-161-164-020124 - AT&T Wireless notice of intent to modify existing telecommunications facilities located in Newtown, West Haven, Orange, Redding, Windsor, Wilton, Southbury, and Wallingford, Connecticut.

Dear Attorney Fisher:

At a public meeting held on February 14, 2002, the Connecticut Siting Council (Council) acknowledged your notice to modify these existing telecommunications facilities, 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 January 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 existing facility sites that would not increase tower height, extend the boundaries of tower sites, increase noise levels at any tower site boundary by six decibels, and increase the total radio frequencies electromagnetic radiation power densities measured at the tower site boundaries to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. These facilities have also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on these towers.

This decision is under the exclusive jurisdiction of the Council. Any additional change to these facilities 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/RM/laf

c: See attached list.

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Decision Letter for EM-AT&T-097-107-117-130-148-156-161-164-020124 Page 2

Honorable Paul F. Hannah, Jr., First Selectman, Town of Wilton Wendy Johnston, Town Planner, Town of Wilton Honorable Mary Hogan, Mayor, Town of Windsor Mario Zavarella, Town Planner, Town of Windsor R. Leon Churchill, Jr., Town Manager, Town of Windsor Honorable Natalie T. Ketcham, First Selectman, Town of Redding Aimee Pardee, Zoning Enforcement Officer, Town of Redding Honorable Mitchell R. Goldblatt, First Selectman, Town of Orange Paul Dinice, Zoning Enforcement Officer, Town of Orange Honorable William W. Dickinson, Jr., Mayor, Town of Wallingford Linda Bush, Town Planner, Town of Wallingford Honorable Mark A.R. Cooper, First Selectman, Town of Southbury Mark D. Cody, Zoning Enforcement Officer, Town of Southbury Honorable H. Richard Borer, Jr., Mayor, City of West Haven James Hill, City Planner, City of West Haven Honorable Herbert C. Rosenthal, First Selectman, Town of Newtown Gary Frenette, Zoning Enforcement Officer, Town of Newtown



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

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February 5, 2002

Honorable Herbert C. Rosenthal First Selectman Town of Newtown Town Hall 45 Main Street Newtown, CT 06470

RE:

EM-AT&T-097-107-117-130-148-156-161-164-020124 - AT&T Wireless notice of intent to modify existing telecommunications facilities located at twelve sites throughout the State of Connecticut.

Dear Mr. Rosenthal:

The Connecticut Siting Council (Council) received this request to modify an existing telecommunications facility, pursuant to Regulations of Connecticut State Agencies Section 16-50j-72.

The Council will consider this item at the next meeting scheduled for February 14, 2002, at 1:30 p.m. in Hearing Room One, Ten Franklin Square, New Britain, Connecticut.

Please call me or inform the Council if you have any questions or comments regarding this proposal.

Thank you for your cooperation and consideration.

Very truly yours,

S/Derek Phelps

Executive Director

SDP/laf

Enclosure: Notice of Intent

c: Gary Frenette, Zoning Enforcement Officer, Town of Newtown

90 MAPLE AVENUE WHITE PLAINS, NEW YORK 10601-5196

CUDDY & FEDER 1971-1995

NEIL J. ALEXANDER (also CT)
CHARLES T. BAZYDLO (also NJ)
THOMAS R. BEIRNE (also DC)
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THOMAS M. BLOOMER
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ROBERT L. WOLFE
DAVID E. WORBY

WILLIAM S. NULL

Of Counsel
MICHAEL R. EDELMAN
ANDREW A. GLICKSON (also CT)
ROBERT L. OSAR (also TX)
MARYANN M. PALERMO
ROBERT C. SCHNEIDER
LOUIS R. TAFFERA

January 23, 2002

VIA FEDERAL EXPRESS

Hon. Mortimer Gelston, Chairman and Members of the Siting Council Connecticut Siting Council 10 Franklin Square New Britain, Connecticut 06051



Re: AT&T Wireless Notice of Exempt Modification

5 Fairfield Drive and 20 Barnabas Road, Newtown, Connecticut

1 Burwell Road, West Haven, Connecticut 1800 Ogg Meadow Road, Orange, Connecticut

100 Old Redding Road, Redding, Connecticut

440 Hayden Station Road, Windsor, Connecticut 128 Mather Street, Wilton, Connecticut

1432 Old Waterbury Road and Russian Village Road, Southbury, Connecticut

Northrup Road, Wallingford and 945 East Center Road, Wallingford

and 316 Woodhouse Avenue, Wallingford, Connecticut

Hon. Mortimer Gelston, Chairman and Members of the Siting Council:

On behalf of AT&T Wireless, we respectfully enclose an original and twenty copies of its notice of exempt modification with respect to the above mentioned facilities together with a check in the amount of \$500.00. We would appreciate it if these matters were placed on the next available agenda for acknowledgment by the Council. Should the Council or staff have any questions regarding this matter, please do not hesitate to contact us.

Very truly yours,

Linda Grant

cc: Christopher B. Fisher, Esq.

C&F&W:

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Of Counsel MICHAEL R. EDELMAN ANDREW A. GLICKSON (also CT) ROBERT L. OSAR (also TX) MARYANN M. PALERMO ROBERT C. SCHNEIDER LOUIS R. TAFFERA

January 23, 2002

VIA FEDERAL EXPRESS

Hon. Mortimer Gelston, Chairman and Members of the Siting Council
Connecticut Siting Council
10 Franklin Square
New Britain, Connecticut 06051

Re:

NEIL J. ALEXANDER (also CT) CHARLES T. BAZYDLO (also NJ) THOMAS R. BEIRNE (also DC)

CHRISTOPHER B. FISHER (also CT)

ANTHONY B. GIOFFRE III (also CT)

THOMAS M. BLOOMER

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KAREN G. GRANIK JOSHUA J. GRAUER

KENNETH F. JURIST

BARRY E. LONG

ROBERT FEDER

AT&T Wireless - EM-AT&T-097-001106 20 Barnabas Road, Newtown, Connecticut Notice of Further Exempt Modification



Hon. Mortimer Gelston, Chairman and Members of the Siting Council:

Connecticut Light and Power Company ("CL&P") holds the Siting Council certificate for the existing communications tower and related facility located at 20 Barnabas Road, Newtown, Connecticut (Docket No. 144). On November 14, 2000 AT&T Wireless ("AT&T"), received the Council's acknowledgement of a notice to modify the existing facility pursuant to Section 16-50j-72 of the Regulations of Connecticut State Agencies (EM-AT&T-097-001106) permitting AT&T to install up to twelve (12) panel antennas at the 136' level on the existing tower, with an associated equipment shelter located within the fenced compound.

This notice of further exempt modification is also being provided pursuant to Section 16-50j-72 of the Council's regulations. AT&T will be installing additional equipment within the existing shelter at the facility. There will be no other infrastructure changes to AT&T's facility.

The proposed addition of equipment to AT&T Wireless' facility does not constitute a "modification" of an existing facility as defined in Connecticut General Statutes Section 16-50i(d). The proposed addition to AT&T Wireless' facility will not result in an increase in the

January 23, 2002 Page 2

Tower's height or extend the boundaries of the existing fenced area surrounding the Tower. Further, there will be no increase in noise levels by six (6) decibels or more at the Tower site's boundary. AT&T has made measurements of the existing facility to confirm compliance with MPE limits and as set forth in a report prepared by Wireless Facilities, Inc., annexed hereto, 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. For all the foregoing reasons, addition of AT&T Wireless' equipment to its existing facility constitutes an exempt modification which will not have a substantially adverse environmental effect.

AT&T Wireless respectfully submits that the proposed addition of equipment to the Barnabas Road Facility meets the Council's exemption criteria and requests an acknowledgment of same.

Respectfully Submitted,

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

cc: First Selectman, Town of Newtown

Darryl Hendrickson, Bechtel Telecommunications



Wireless Facilities, Inc. 1840 Michael Faraday Drive Suite 200 Reston, VA 20190

December 20th, 2001

Mr. Mortimer A. Gelston, Chairman Connecticut Siting Council 10 Franklin Square New Britain, CT 06051

RE: FCC Compliance Statement for AT&T Site CT-178 (Newtown-Hawleyville)

Dear Mr. Gelston:

On behalf of AT&T Wireless, Wireless Facilities Inc. has performed in-field RF measurements and office analyses for the above referenced site to determine compliance with FCC mandated Maximum Permissible Exposure (MPE) limits as defined in 47 CFR § 1.1310.

The table below gives a brief summary of the site location, its configuration and associated technical parameters.

Summary of the site configuration and technical parameters:

Site ID	CT-178
Site Name	Newtown-Hawleyville
Latitude	41.42777
Longitude	-73.34388
Address of structure	20 Barnabas Rd
	Newtown, CT 06470
Type of structure	Lattice Tower
Antenna structure owner	AT&T Wireless services
Address of antenna owner	333 Crossways Park Dr
	Woodbury, NY 11797
FCC class and Type of service	PCS TDMA (IS-136)
	PCS GSM
Operating frequency	D, E bands (PCS)
Azimuths	0,120,240
Elevation (ft)	136
Antenna manufacturer	EMS
Antenna type	Panel

The mathematical equations used in evaluating the power density values are exactly as outlined in the Office of Engineering & Technology (OET) Bulletin Number 65 which contains the FCC guidelines for evaluating human exposure to radio-frequency electromagnetic fields.

In the case of a single radiating antenna, a prediction for power density in the far field of the antenna can be written as:

$$S = \frac{EIRP}{4\pi D^2} = \frac{1.64 * ERP}{4\pi D^2}$$

Where:

 $S = Power density in W/m^2$

EIRP = Effective isotropic radiated power (W)

ERP = Effective radiated power (W)

D = Distance in meters

Using the EPA's recommended factor of 1.6 for 100 % reflection, the worst case power density can be obtained by incorporating this factor into the above equation. If the distance, D, is in meters, the ERP is in Watts, then the worst case power density in μ W/cm² is given by

$$S = \frac{33.4 * ERP}{D^2}$$
 (Section 2, OET bulletin 65).

Where:

 $S = Power density in \mu W/cm^2$

ERP = Effective radiated power (W)

D = Distance in meters

WFI's analysis considered both the current configuration as well as the future GSM deployment AT&T is proposing. For the current configuration, both in-field measurements and a predictive analysis tool were used to determine compliance. For the future deployment, only a predictive analysis was performed. The maximum worst-case values of the power density for this analysis are outlined below:

Configuration	Point of Worst Case Predicted Level	Predicted Value μW/cm²	Maximum Limit for PCS Band Uncontrolled Environment Set by FCC μW/cm²	% of the Standard
Current PCS TDMA configuration	1400 feet away in front of the antenna	0.42	1000	0.042
Future PCS TDMA and GSM configuration	1400 feet away in front of the antenna	0.57	1000	0.057

In addition to predictive analysis, on-site data was recorded at different locations around the Lattice tower. In all areas, less than 0.06 % of the MPE for public/uncontrolled limits was recorded. The reason the actual measurements are slightly higher than the predicted values is because the actual measurements include emissions from all the existing carriers at that site while the theoretical study focused on the level of emissions contributed by AT&T only.

On-site measuring point	Worst Case Measured Value μW/cm²	Maximum Limit for PCS Band Uncontrolled Environment Set by FCC μW/cm²	% of the Standard
50 meters in front of sector 1	0.52	1000	0.052
40 meters in front of sector 2	0.58	1000	0.058
50 meters in front of sector 3	0.46	1000	0.046

The results of these analyses indicate that output power levels for the AT&T owned equipment deployed at the above referenced facility meets FCC approved exposure limits for all uncontrolled areas where general population exposure may exist. Thus, the maximum level of RF radiation in all uncontrolled areas (Assuming a worst case scenario and a 100 % duty cycle for all the transmitters.) is less than 0.06 % of the maximum permissible exposure limit mandated by the FCC and endorsed by the NCRP and ANSI/IEEE.

To the best of my knowledge, the statements made and information disclosed in this study are complete and accurate.

Sincerely,

Wireless Facilities, Inc.

Dan Hardiman

Senior Engineer II

Fixed Network Engineering

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Of Counsel MICHAEL R. EDELMAN ANDREW A. GLICKSON (also CT) ROBERT L. OSAR (also TX) MARYANN M. PALERMO ROBERT C. SCHNEIDER LOUIS R. TAFFERA

January 23, 2002

VIA FEDERAL EXPRESS

Hon. Mortimer Gelston, Chairman and Members of the Siting Council Connecticut Siting Council 10 Franklin Square New Britain, Connecticut 06051

Re:

NEIL J. ALEXANDER (also CT)

THOMAS R. BEIRNE (also DC)

THOMAS M. BLOOMER

JOSEPH P. CARLUCCI

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MICHAEL L. KATZ (also NJ)
JOSHUA E. KIMERLING (also CT)

DANIEL F. LEARY (also CT)

AT&T Wireless - EM-SCLP-097-000807 5 Fairfield Drive, Newtown, Connecticut Notice of Further Exempt Modification



Hon. Mortimer Gelston, Chairman and Members of the Siting Council:

Springwich Cellular Limited Partnership holds the Siting Council certificate for the existing communications tower and related facility located at 5 Fairfield Drive, Newtown, Connecticut (Docket No. 75). On August 31, 2000 Springwich Cellular Limited Partnership, on behalf of AT&T Wireless ("AT&T"), received the Council's acknowledgement of a notice to modify the existing facility pursuant to Section 16-50j-72 of the Regulations of Connecticut State Agencies (EM- SCLP-097-000807) permitting AT&T to install panel antennas at the 130' level on the existing tower, with an associated equipment shelter located within the fenced compound.

This notice of further exempt modification is also being provided pursuant to Section 16-50j-72 of the Council's regulations. AT&T will be installing additional equipment within the existing shelter at the facility. There will be no other infrastructure changes to AT&T's facility.

The proposed addition of equipment to AT&T Wireless' facility does not constitute a "modification" of an existing facility as defined in Connecticut General Statutes Section 16-50i(d). The proposed addition to AT&T Wireless' facility will not result in an increase in the Wireless Facilities, Inc. 1840 Michael Faraday Drive Suite 200 Reston, VA 20190

January 2, 2002

Mr. Mortimer A. Gelston, Chairman Connecticut Siting Council 10 Franklin Square New Britain, CT 06051

RE: FCC Compliance Statement for AT&T Site CT-177 (Newtown West SNET)

Dear Mr. Gelston:

On behalf of AT&T Wireless, Wireless Facilities Inc. has performed in-field RF measurements and office analyses for the above referenced site to determine compliance with FCC mandated Maximum Permissible Exposure (MPE) limits as defined in 47 CFR § 1.1310.

The table below gives a brief summary of the site location, its configuration and associated technical parameters.

Summary of the site configuration and technical parameters:

Site ID	CT-177
Site Name	Newtown West-SNET
Latitude	41.42555
Longitude	-73.37444
Address of structure	5 Fairfield Drive
	Newtown, CT 06470
Type of structure	Monopole
Antenna structure owner	AT&T
Address of antenna owner	15 East Midland AVE
4	Paramus, NJ 07652
FCC class and Type of service	PCS TDMA (IS-136), PCS GSM
Operating frequency	D, E bands (PCS)
Azimuths	0,110,240
Elevation (ft)	130
Antenna manufacturer	Allgon
Antenna type	Panel

The mathematical equations used in evaluating the power density values are exactly as outlined in the Office of Engineering & Technology (OET) Bulletin Number 65 which contains the FCC guidelines for evaluating human exposure to radio-frequency electromagnetic fields.

In the case of a single radiating antenna, a prediction for power density in the far field of the antenna can be written as:

$$S = \frac{EIRP}{4\pi D^2} = \frac{1.64 * ERP}{4\pi D^2}$$

Where:

 $S = Power density in W/m^2$

EIRP = Effective isotropic radiated power (W)

ERP = Effective radiated power (W)

D = Distance in meters

Using the EPA's recommended factor of 1.6 for 100 % reflection, the worst case power density can be obtained by incorporating this factor into the above equation. If the distance, D, is in meters, the ERP is in Watts, then the worst case power density in μ W/cm² is given by

$$S = \frac{33.4 * ERP}{D^2}$$
 (Section 2, OET bulletin 65).

Where:

 $S = Power density in \mu W/cm^2$

ERP = Effective radiated power (W)

D = Distance in meters

WFI's analysis considered both the current configuration as well as the future GSM deployment AT&T is proposing. For the current configuration, both in-field measurements and a predictive analysis tool were used to determine compliance. For the future deployment, only a predictive analysis was performed. The maximum worst-case values of the power density for this analysis are outlined below:

Configuration	Point of Worst Case Predicted Level	Predicted Value μW/cm²	Maximum Limit for PCS Band Uncontrolled Environment Set by FCC μW/cm²	% of the Standard
Current PCS TDMA configuration	290 feet away in front of the antenna	0.82	1000	0.08
Future PCS TDMA and GSM configuration	290 feet away in front of the antenna	1.10	1000	0.11

In addition to predictive analysis, on-site data was recorded at different locations around the monopole. In all areas, less than or equal to 1.65 % of the MPE for public/uncontrolled limits was recorded. The reason the actual measurements are higher than the predicted values is because the actual measurements include emissions from the other carriers at that site while the theoretical study focused on the level of emissions contributed by AT&T only.

On-site measuring point	Worst Case Measured Value μW/cm²	Maximum Limit for PCS Band Uncontrolled Environment Set by FCC μW/cm²	% of the Standard
5 meters in front of sector 1	1.87	1000	0.187
30 meters in front of sector 2	16.5	1000	1.65
40 meters in front of sector 3	4.65	1000	0.465

The results of these analyses indicate that output power levels for the AT&T owned equipment deployed at the above referenced facility meets FCC approved exposure limits for all uncontrolled areas where general population exposure may exist. Thus, the maximum level of RF radiation in all uncontrolled areas (Assuming a worst case scenario and a 100 % duty cycle for all the transmitters.) is less than or equal to 1.65 % of the maximum permissible exposure limit mandated by the FCC and endorsed by the NCRP and ANSI/IEEE.

To the best of my knowledge, the statements made and information disclosed in this study are complete and accurate.

Sincerely,

Wireless Facilities, Inc.

Dan Hardiman Senior Engineer II

Fixed Network Engineering



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

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February 5, 2002

Honorable Mitchell R. Goldblatt First Selectman Town of Orange Town Hall 617 Orange Center Road Orange, CT 06477-2423

RE:

EM-AT&T-097-107-117-130-148-156-161-164-020124 - AT&T Wireless notice of intent to modify existing telecommunications facilities located at twelve sites throughout the State of Connecticut.

Dear Mr. Goldblatt:

The Connecticut Siting Council (Council) received this request to modify an existing telecommunications facility, pursuant to Regulations of Connecticut State Agencies Section 16-50j-72.

The Council will consider this item at the next meeting scheduled for February 14, 2002, at 1:30 p.m. in Hearing Room One, Ten Franklin Square, New Britain, Connecticut.

Please call me or inform the Council if you have any questions or comments regarding this proposal.

Thank you for your cooperation and consideration.

Very truly yours,

S. Derek Phelps
Executive Director

SDP/laf

Enclosure: Notice of Intent

c: Paul Dinice, Zoning Enforcement Officer, Town of Orange

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VIA FEDERAL EXPRESS

Hon. Mortimer Gelston, Chairman and Members of the Siting Council
Connecticut Siting Council
10 Franklin Square
New Britain, Connecticut 06051

JAN 2 4 2002

Re:

NEIL J. ALEXANDER (also CT) CHARLES T. BAZYDLO (also NJ)

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JOSHUA E. KIMERLING (also CT)

KAREN G. GRANIK JOSHUA J. GRAUER

ROBERT FEDER

AT&T Wireless - Petition No. 436

1800 Ogg Meadow Road, Orange, Connecticut

Notice of Exempt Modification

Hon. Mortimer Gelston, Chairman and Members of the Siting Council:

Crown Atlantic Company LLC ("Crown") holds the Siting Council certificate for the existing communications tower and related facility located at off Ogg Meadow Road, Orange, Connecticut (Docket No. 177A). On October 21, 1999 Crown, on behalf of AT&T Wireless ("AT&T"), received a ruling from the Council that AT&T's proposed shared use of the existing facility complied with Section 16-50aa of the Regulations of Connecticut State Agencies (Petition No. 436) permitting AT&T to install three (3) panel antennas on a pipe mounted to the top of the tower, with an associated equipment shelter located within the fenced compound.

This notice of exempt modification is being provided pursuant to Section 16-50j-72 of the Council's regulations. AT&T will be installing additional equipment within the existing shelter at the facility. There will be no other infrastructure changes to AT&T's facility.

The proposed addition of equipment to AT&T Wireless' facility does not constitute a "modification" of an existing facility as defined in Connecticut General Statutes Section 16-50i(d). The proposed addition to AT&T Wireless' facility will not result in an increase in the Tower's height or extend the boundaries of the existing fenced area surrounding the Tower.

January 23, 2002 Page 2

Further, there will be no increase in noise levels by six (6) decibels or more at the Tower site's boundary. AT&T has made measurements of the existing facility to confirm compliance with MPE limits and as set forth in a report prepared by Wireless Facilities, Inc., annexed hereto, 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. For all the foregoing reasons, addition of AT&T Wireless' equipment to its existing facility constitutes an exempt modification which will not have a substantially adverse environmental effect.

AT&T Wireless respectfully submits that the proposed addition of equipment to the Ogg Meadow Road Facility meets the Council's exemption criteria and requests an acknowledgment of same.

Respectfully Submitted,

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

cc: First Selectman, Town of Orange

Darryl Hendrickson, Bechtel Telecommunications

Kenneth C. Baldwin, Robinson & Cole



Wireless Facilities, Inc. 1840 Michael Faraday Drive Suite 200 Reston, VA 20190

December 19, 2001

Mr. Mortimer A. Gelston, Chairman Connecticut Siting Council 10 Franklin Square New Britain, CT 06051

RE: FCC Compliance Statement for AT&T Site CT-161 (Orange North Crown Atlantic monopole)

Dear Mr. Gelston:

On behalf of AT&T Wireless, Wireless Facilities Inc. has performed in-field RF measurements and office analyses for the above referenced site to determine compliance with FCC mandated Maximum Permissible Exposure (MPE) limits as defined in 47 CFR § 1.1310.

The table below gives a brief summary of the site location, its configuration and associated technical parameters.

Summary of the site configuration and technical parameters:

Site ID	CT-161	
Site Name	Orange Crown Atlantic Monopole	
Latitude	41.30777	
Longitude	-73.03277	
Owner of the structure	Crown	
Address of structure	1800 Ogg Meadow rd	
	Orange, CT	
Type of structure	Monopole	
Antenna structure owner	AT&T Wireless services	
Address of antenna owner	149 Water street,	
	Norwalk, CT	
FCC class and Type of service	PCS TDMA (IS-136)	
Operating frequency	D, E bands (PCS)	
Azimuths	60,180,300	
Elevation (ft)	170	
Antenna manufacturer	EMS Wireless	
Antenna type	Panel	

The mathematical equations used in evaluating the power density values are exactly as outlined in the Office of Engineering & Technology (OET) Bulletin Number 65 which contains the FCC guidelines for evaluating human exposure to radio-frequency electromagnetic fields.

In the case of a single radiating antenna, a prediction for power density in the far field of the antenna can be written as:

$$S = \frac{EIRP}{4\pi D^2} = \frac{1.64 * ERP}{4\pi D^2}$$

Where:

 $S = Power density in W/m^2$

EIRP = Effective isotropic radiated power (W)

ERP = Effective radiated power (W)

D = Distance in meters

Using the EPA's recommended factor of 1.6 for 100 % reflection, the worst case power density can be obtained by incorporating this factor into the above equation. If the distance, D, is in meters, the ERP is in Watts, then the worst case power density in μ W/cm² is given by

$$S = \frac{33.4 * ERP}{D^2}$$
 (Section 2, OET bulletin 65).

Where:

 $S = Power density in \mu W/cm^2$

ERP = Effective radiated power (W)

D = Distance in meters

WFI's analysis considered both the current configuration as well as the future GSM deployment AT&T is proposing. For the current configuration, both in-field measurements and a predictive analysis tool were used to determine compliance. For the future deployment, only a predictive analysis was performed. The maximum worst-case values of the power density for this analysis are outlined below:

Configuration	Point of Worst Case Predicted Level	Predicted Value μW/cm²	Maximum Limit for PCS Band Uncontrolled Environment Set by FCC μW/cm²	% of the Standard
Current PCS TDMA configuration	120 feet away in front of the antenna	0.38	1000	0.04
Future PCS TDMA and GSM configuration	120 feet away in front of the antenna	0.45	1000	0.05

In addition to predictive analysis, on-site data was recorded at different locations around the monopole. In all areas, less than 1.5 % of the MPE for public/uncontrolled limits was recorded. The reason the actual measurements are higher than the predicted values is because the actual measurements include emissions from the other carriers at that site while the theoretical study focused on the level of emissions contributed by AT&T only.

On-site measuring point	Worst Case Measured Value μW/cm²	Maximum Limit for PCS Band Uncontrolled Environment Set by FCC μW/cm²	% of the Standard
50 meters in front of sector 1	10	1000	1
50 meters in front of sector 2	12	1000	1.2
40 meters in front of sector 3	15	1000	1.5

The results of these analyses indicate that output power levels for the AT&T owned equipment deployed at the above referenced facility meets FCC approved exposure limits for all uncontrolled areas where general population exposure may exist. Thus, the maximum level of RF radiation in all uncontrolled areas (Assuming a worst case scenario and a 100 % duty cycle for all the transmitters.) is less than 1.5 % of the maximum permissible exposure limit mandated by the FCC and endorsed by the NCRP and ANSI/IEEE.

To the best of my knowledge, the statements made and information disclosed in this study are complete and accurate.

Sincerely,

Wireless Facilities, Inc.

Dan Hardiman

Senior Engineer II

Fixed Network Engineering



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051 Phone: (860) 827-2935 Fax: (860) 827-2950 E-Mail: siting.council@po.state.ct.us Web Site: www.state.ct.us/csc/index.htm

February 5, 2002

Honorable Natalie T. Ketcham First Selectman Town of Redding Town Office Building 100 Hill Road P.O. Box 1028 Redding, CT 06875

RE:

EM-AT&T-097-107-117-130-148-156-161-164-020124 - AT&T Wireless notice of intent to modify existing telecommunications facilities located at twelve sites throughout the State of Connecticut.

Dear Ms. Ketcham:

The Connecticut Siting Council (Council) received this request to modify an existing telecommunications facility, pursuant to Regulations of Connecticut State Agencies Section 16-50j-72.

The Council will consider this item at the next meeting scheduled for February 14, 2002, at 1:30 p.m. in Hearing Room One, Ten Franklin Square, New Britain, Connecticut.

Please call me or inform the Council if you have any questions or comments regarding this proposal.

Thank you for your cooperation and consideration.

Very truly yours,

S. Derek Phelps

Executive Director

SDP/laf

Enclosure: Notice of Intent

c: Aimee Pardee, Zoning Enforcement Officer, Town of Redding

90 MAPLE AVENUE WHITE PLAINS, NEW YORK 10601-5196

CUDDY & FEDER 1971-1995

NEIL J. ALEXANDER (also CT) CHARLES T. BAZYDLO (also NJ) THOMAS R. BEIRNE (also DC) THOMAS M. BLOOMER JOSEPH P. CARLUCCI KENNETH J. DUBROFF ROBERT FEDER CHRISTOPHER B. FISHER (also CT) ANTHONY B. GIOFFRE III (also CT) SUSAN E.H. GORDON KAREN G. GRANIK JOSHUA J. GRAUER WAYNE E. HELLER (also CT) KENNETH F. JURIST MICHAEL L. KATZ (also NJ) JOSHUA E. KIMERLING (also CT) DANIEL F. LEARY (also CT) BARRY E. LONG

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STAMFORD, CONNECTICUT NORWALK, CONNECTICUT WILLIAM S. NULL
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ELISABETH N. RADOW
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DAVID E. WORBY

Of Counsel MICHAEL R. EDDELMAN ANDREW A. GLICKSON (also CT) ROBERT L. OSAR (also TX) MARYANN M. PALERMO ROBERT C. SCHNEIDER LOUIS R. TAFFERA

VIA FEDERAL EXPRESS

Hon. Mortimer Gelston, Chairman and Members of the Siting Council Connecticut Siting Council 10 Franklin Square New Britain, Connecticut 06051

Re:

AT&T Wireless - EM-SCLP-117-000320 100 Old Redding Road, Redding, Connecticut Notice of Further Exempt Modification

Hon. Mortimer Gelston, Chairman and Members of the Siting Council:

Springwich Cellular Limited Partnership holds the Siting Council certificate for the existing communications tower and related facility located at 100 Old Redding Road, Redding, Connecticut (Docket No. 167). On April 17, 2000 Springwich Cellular Limited Partnership, on behalf of AT&T Wireless ("AT&T"), received the Council's acknowledgement of a notice to modify the existing facility pursuant to Section 16-50j-72 of the Regulations of Connecticut State Agencies (EM- SCLP-117-000320) permitting AT&T to install up to twelve (12) panel antennas at the 143' level on the existing tower, with an associated equipment shelter located within the fenced compound.

This notice of further exempt modification is also being provided pursuant to Section 16-50j-72 of the Council's regulations. AT&T will be installing additional equipment within the existing shelter at the facility. There will be no other infrastructure changes to AT&T's facility.

The proposed addition of equipment to AT&T Wireless' facility does not constitute a "modification" of an existing facility as defined in Connecticut General Statutes Section 16-

January 23, 2002 Page 2

50i(d). The proposed addition to AT&T Wireless' facility will not result in an increase in the Tower's height or extend the boundaries of the existing fenced area surrounding the Tower. Further, there will be no increase in noise levels by six (6) decibels or more at the Tower site's boundary. AT&T made measurements of the existing facility to confirm compliance with MPE limits and as set forth in a report prepared by Wireless Facilities, Inc., annexed hereto, 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. For all the foregoing reasons, addition of AT&T Wireless' equipment to its existing facility constitutes an exempt modification which will not have a substantially adverse environmental effect.

AT&T Wireless respectfully submits that the proposed addition of the equipment to the Old Redding Road Facility meets the Council's exemption criteria and requests an acknowledgment of same.

Respectfully Submitted,

Christopher B. Fisher, Esq.

On behalf of AT&T Wireless

cc:

First Selectman, Town of Redding

Darryl Hendrickson, Bechtel Telecommunications

Peter W. Van Wilgen, Springwich Cellular LP

Wireless Facilities, Inc. 1840 Michael Faraday Drive Suite 200 Reston, VA 20190

December 19, 2001

Mr. Mortimer A. Gelston, Chairman Connecticut Siting Council 10 Franklin Square New Britain, CT 06051

RE: FCC Compliance Statement for AT&T Site CT-067 (Redding West-Branchville)

Dear Mr. Gelston:

On behalf of AT&T Wireless, Wireless Facilities Inc. has performed in-field RF measurements and office analyses for the above referenced site to determine compliance with FCC mandated Maximum Permissible Exposure (MPE) limits as defined in 47 CFR § 1.1310.

The table below gives a brief summary of the site location, its configuration and associated technical parameters.

Summary of the site configuration and technical parameters:

Site ID	CT-067
Site Name	Redding West-Branchville
Latitude	41.28722
Longitude	-73.43777
Address of structure	Old Redding Road,
	Redding, CT
Type of structure	Lattice tower
Antenna structure owner	AT&T Wireless services
Address of antenna owner	149 Water street
	Norwalk, CT
FCC class and Type of service	PCS TDMA (IS-136)
Operating frequency	D, E bands (PCS)
Azimuths	65,200,300
Elevation (ft)	143
Antenna manufacturer	EMS Wireless
Antenna type	Panel

The mathematical equations used in evaluating the power density values are exactly as outlined in the Office of Engineering & Technology (OET) Bulletin Number 65 which contains the FCC guidelines for evaluating human exposure to radio-frequency electromagnetic fields.

In the case of a single radiating antenna, a prediction for power density in the far field of the antenna can be written as:

$$S = \frac{EIRP}{4\pi D^2} = \frac{1.64 * ERP}{4\pi D^2}$$

Where:

 $S = Power density in W/m^2$

EIRP = Effective isotropic radiated power (W)

ERP = Effective radiated power (W)

D = Distance in meters

Using the EPA's recommended factor of 1.6 for 100 % reflection, the worst case power density can be obtained by incorporating this factor into the above equation. If the distance, D, is in meters, the ERP is in Watts, then the worst case power density in μ W/cm² is given by

$$S = \frac{33.4 * ERP}{D^2}$$
 (Section 2, OET bulletin 65).

Where:

 $S = Power density in \mu W/cm^2$

ERP = Effective radiated power (W)

D = Distance in meters

WFI's analysis considered both the current configuration as well as the future GSM deployment AT&T is proposing. For the current configuration, both in-field measurements and a predictive analysis tool were used to determine compliance. For the future deployment, only a predictive analysis was performed. The maximum worst-case values of the power density for this analysis are outlined below:

Configuration	Point of Worst Case Predicted Level	Predicted Value μW/cm²	Maximum Limit for PCS Band Uncontrolled Environment Set by FCC μW/cm²	% of the Standard
Current PCS TDMA configuration	1500 feet away in front of the antenna	0.37	1000	0.04
Future PCS TDMA and GSM configuration	1500 feet away in front of the antenna	0.49	1000	0.05

In addition to predictive analysis, on-site data was recorded at different locations around the Lattice tower. In all areas, less than 1.75 % of the MPE for public/uncontrolled limits was recorded. The reason the actual measurements are higher than the predicted values is because the actual measurements include emissions from all the existing carriers at that site while the theoretical study focused on the level of emissions contributed by AT&T only.

On-site measuring point	Worst Case Measured Value μW/cm²	Maximum Limit for PCS Band Uncontrolled Environment Set by FCC μW/cm²	% of the Standard
15 meters in front of sector 1	17.5	1000	1.75
35 meters in front of sector 2	14	1000	1.4
40 meters in front of sector 3	6.6	1000	0.66

The results of these analyses indicate that output power levels for the AT&T owned equipment deployed at the above referenced facility meets FCC approved exposure limits for all uncontrolled areas where general population exposure may exist. Thus, the maximum level of RF radiation in all uncontrolled areas (Assuming a worst case scenario and a 100 % duty cycle for all the transmitters.) is less than 1.75 % of the maximum permissible exposure limit mandated by the FCC and endorsed by the NCRP and ANSI/IEEE.

To the best of my knowledge, the statements made and information disclosed in this study are complete and accurate.

Sincerely,

Wireless Facilities, Inc.

Dan Hardiman

Senior Engineer II

Fixed Network Engineering



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051 Phone: (860) 827-2935 Fax: (860) 827-2950 E-Mail: siting.council@po.state.ct.us Web Site: www.state.ct.us/csc/index.htm

February 5, 2002

Honorable Mark A. R. Cooper First Selectman Town of Southbury Town Hall 501 Main Street South Southbury, CT 06488-2295

RE:

EM-AT&T-097-107-117-130-148-156-161-164-020124 - AT&T Wireless notice of intent to modify existing telecommunications facilities located at twelve sites throughout the State of Connecticut.

Dear Mr. Cooper:

The Connecticut Siting Council (Council) received this request to modify an existing telecommunications facility, pursuant to Regulations of Connecticut State Agencies Section 16-50j-72.

The Council will consider this item at the next meeting scheduled for February 14, 2002, at 1:30 p.m. in Hearing Room One, Ten Franklin Square, New Britain, Connecticut.

Please call me or inform the Council if you have any questions or comments regarding this proposal.

Thank you for your cooperation and consideration.

Very trylly yours,

S. Derek Phelps Executive Director

SDP/laf

Enclosure: Notice of Intent

c: Mark D. Cody, Zoning Enforcement Officer, Town of Southbury

90 MAPLE AVENUE WHITE PLAINS, NEW YORK 10601-5196

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STAMFORD, CONNECTICUT NORWALK, CONNECTICUT

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ROBERT L. OSAR (also TX)
MARYANN M. PALERMO
ROBERT C. SCHNEIDER
LOUIS R. TAFFERA

January 23, 2002

VIA FEDERAL EXPRESS

Hon. Mortimer Gelston, Chairman and Members of the Siting Council
Connecticut Siting Council
10 Franklin Square
New Britain, Connecticut 06051

Re:

NEIL J. ALEXANDER (also CT)

THOMAS M. BLOOMER

JOSEPH P. CARLUCCI

KENNETH J. DUBROFF

SUSAN E.H. GORDON

KAREN G. GRANIK

BARRY E. LONG

JOSHUA J. GRAUER WAYNE E. HELLER (also CT)

KENNETH F. JURIST MICHAEL L. KATZ (also NJ)

DANIEL F. LEARY (also CT)

JOSHUA E. KIMERLING (also CT)

ROBERT FEDER

CHARLES T. BAZYDLO (also NJ) THOMAS R. BEIRNE (also DC)

CHRISTOPHER B. FISHER (also CT)

ANTHONY B. GIOFFRE III (also CT)

AT&T Wireless - EM-CROWN-130-991126 1432 Old Waterbury Road, Southbury, Connecticut Notice of Further Exempt Modification



Hon. Mortimer Gelston, Chairman and Members of the Siting Council:

Crown Atlantic Company LLC ("Crown") holds the Siting Council certificate for the existing communications tower and related facility located at 1432 Old Waterbury Road, Southbury, Connecticut (Docket No. 88). On December 8, 1999 Crown, on behalf of AT&T Wireless ("AT&T"), received the Council's acknowledgement of a notice to modify the existing facility pursuant to Section 16-50j-72 of the Regulations of Connecticut State Agencies (EM-CROWN-130-991126) permitting AT&T to install nine (9) panel antennas at the 185' level on the existing tower, with associated equipment cabinets located on a 9' x 20' concrete pad within the fenced compound.

This notice of further exempt modification is also being provided pursuant to Section 16-50j-72 of the Council's regulations. AT&T will be installing an additional equipment cabinet (approximately 76"H x 76"W x 30"D) on AT&T's existing concrete pad at the facility. There will be no other infrastructure changes to AT&T's facility.

The proposed addition of an equipment cabinet to AT&T Wireless' facility does not constitute a "modification" of an existing facility as defined in Connecticut General Statutes

The mathematical equations used in evaluating the power density values are exactly as outlined in the Office of Engineering & Technology (OET) Bulletin Number 65 which contains the FCC guidelines for evaluating human exposure to radio-frequency electromagnetic fields.

In the case of a single radiating antenna, a prediction for power density in the far field of the antenna can be written as:

$$S = \frac{EIRP}{4\pi D^2} = \frac{1.64 * ERP}{4\pi D^2}$$

Where:

 $S = Power density in W/m^2$

EIRP = Effective isotropic radiated power (W)

ERP = Effective radiated power (W)

D = Distance in meters

Using the EPA's recommended factor of 1.6 for 100 % reflection, the worst case power density can be obtained by incorporating this factor into the above equation. If the distance, D, is in meters, the ERP is in Watts, then the worst case power density in $\mu W/cm^2$ is given by

$$S = \frac{33.4 * ERP}{D^2}$$
 (Section 2, OET bulletin 65).

Where:

 $S = Power density in \mu W/cm^2$

ERP = Effective radiated power (W)

D = Distance in meters

WFI's analysis considered both the current configuration as well as the future GSM deployment AT&T is proposing. For the current configuration, both in-field measurements and a predictive analysis tool were used to determine compliance. For the future deployment, only a predictive analysis was performed. The maximum worst-case values of the power density for this analysis are outlined below:

Configuration	Point of Worst Case Predicted Level	Predicted Value μW/cm²	Maximum Limit for PCS Band Uncontrolled Environment Set by FCC μW/cm²	% of the Standard
Current PCS TDMA configuration	1900 feet away in front of the antenna	0.23	1000	0.023
Future PCS TDMA and GSM configuration	1900 feet away in front of the antenna	0.31	1000	0.031

In addition to predictive analysis, on-site data was recorded at different locations around the monopole. In all areas, less than 3.15 % of the MPE for public/uncontrolled limits was recorded. The reason the actual measurements are higher than the predicted values is because the actual measurements include emissions from the other carriers at that site while the theoretical study focused on the level of emissions contributed by AT&T only.

On-site measuring point	Worst Case Measured Value μW/cm²	Maximum Limit for PCS Band Uncontrolled Environment Set by FCC μW/cm²	% of the Standard
30 meters in front of sector 1	16.5	1000	1.65
25 meters in front of sector 2	31.5	1000	3.15
40 meters in front of sector 3	7.5	1000	0.75

The results of these analyses indicate that output power levels for the AT&T owned equipment deployed at the above referenced facility meets FCC approved exposure limits for all uncontrolled areas where general population exposure may exist. Thus, the maximum level of RF radiation in all uncontrolled areas (Assuming a worst case scenario and a 100 % duty cycle for all the transmitters.) is less than 3.15 % of the maximum permissible exposure limit mandated by the FCC and endorsed by the NCRP and ANSI/IEEE.

To the best of my knowledge, the statements made and information disclosed in this study are complete and accurate.

Sincerely,

Wireless Facilities, Inc.

Dan Hardiman

Senior Engineer II

Fixed Network Engineering

90 MAPLE AVENUE WHITE PLAINS, NEW YORK 10601-5196

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VIA FEDERAL EXPRESS

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JOSHUA E. KIMERLING (also CT)

KAREN G. GRANIK JOSHUA J. GRAUER

BARRY E. LONG

ROBERT FEDER

Hon. Mortimer Gelston, Chairman and Members of the Siting Council Connecticut Siting Council 10 Franklin Square New Britain, Connecticut 06051

Re: AT&T Wireless - TS-AT&T-130-000828

Russian Village Road, Southbury, Connecticut

Notice of Exempt Modification

Hon. Mortimer Gelston, Chairman and Members of the Siting Council:

On September 19, 2000 the Council ruled that AT&T's proposed shared use of the existing Sprint facility complied with Section 16-50aa of the Regulations of Connecticut State Agencies (TS-AT&T-130-000828) permitting AT&T to install three (3) panel antennas on a pipe mounted to the top of the tower, with an associated equipment shelter located within the fenced compound.

This notice of exempt modification is being provided pursuant to Section 16-50j-72 of the Council's regulations. AT&T will be installing additional equipment within the existing shelter at the facility. There will be no other infrastructure changes to AT&T's facility.

The proposed addition of equipment to AT&T Wireless' facility does not constitute a "modification" of an existing facility as defined in Connecticut General Statutes Section 16-50i(d). The proposed addition to AT&T Wireless' facility will not result in an increase in the Tower's height or extend the boundaries of the existing fenced area surrounding the Tower. Further, there will be no increase in noise levels by six (6) decibels or more at the Tower site's



January 23, 2002 Page 2

boundary. AT&T has made measurements of the existing facility to confirm compliance with MPE limits and as set forth in a report prepared by Wireless Facilities, Inc., annexed hereto, 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. For all the foregoing reasons, addition of AT&T Wireless' equipment to its existing facility constitutes an exempt modification which will not have a substantially adverse environmental effect.

AT&T Wireless respectfully submits that the proposed addition of equipment to the Russian Village Road Facility meets the Council's exemption criteria and requests an acknowledgment of same.

Respectfully Submitted,

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

cc: First Selectman, Town of Southbury

Darryl Hendrickson, Bechtel Telecommunications



Wireless Facilities, Inc. 1840 Michael Faraday Drive Suite 200 Reston, VA 20190

December 20, 2001

Mr. Mortimer A. Gelston, Chairman Connecticut Siting Council 10 Franklin Square New Britain, CT 06051

RE: FCC Compliance Statement for AT&T Site CT-183 (Southbury West)

Dear Mr. Gelston:

On behalf of AT&T Wireless, Wireless Facilities Inc. has performed in-field RF measurements and office analyses for the above referenced site to determine compliance with FCC mandated Maximum Permissible Exposure (MPE) limits as defined in 47 CFR § 1.1310.

The table below gives a brief summary of the site location, its configuration and associated technical parameters.

Summary of the site configuration and technical parameters:

Site ID	CT-183	
Site Name	Southbury West	
Latitude	41.44888	
Longitude	-73.25166	
Address of structure	100 Russian Village Rd., Southbury,	
	CT 06488.	
Type of structure	Monopole	
Antenna structure owner	AT&T Wireless services	
Address of antenna owner	15 East Midland Ave,	
	Paramus, NJ 07652	
FCC class and Type of service	PCS TDMA (IS-136)	
Operating frequency	D, E bands (PCS)	
Azimuths	50,170,290	
Elevation (ft)	130	
Antenna manufacturer	EMS Wireless	
Antenna type	Panel	

The mathematical equations used in evaluating the power density values are exactly as outlined in the Office of Engineering & Technology (OET) Bulletin Number 65 which contains the FCC guidelines for evaluating human exposure to radio-frequency electromagnetic fields.

In the case of a single radiating antenna, a prediction for power density in the far field of the antenna can be written as:

$$S = \frac{EIRP}{4\pi D^2} = \frac{1.64 * ERP}{4\pi D^2}$$

Where:

 $S = Power density in W/m^2$

EIRP = Effective isotropic radiated power (W)

ERP = Effective radiated power (W)

D = Distance in meters

Using the EPA's recommended factor of 1.6 for 100 % reflection, the worst case power density can be obtained by incorporating this factor into the above equation. If the distance, D, is in meters, the ERP is in Watts, then the worst case power density in μ W/cm² is given by

$$S = \frac{33.4 * ERP}{D^2}$$
 (Section 2, OET bulletin 65).

Where:

 $S = Power density in \mu W/cm^2$

ERP = Effective radiated power (W)

D = Distance in meters

WFI's analysis considered both the current configuration as well as the future GSM deployment AT&T is proposing. For the current configuration, both in-field measurements and a predictive analysis tool were used to determine compliance. For the future deployment, only a predictive analysis was performed. The maximum worst-case values of the power density for this analysis are outlined below:

Configuration	Point of Worst Case Predicted Level	Predicted Value μW/cm²	Maximum Limit for PCS Band Uncontrolled Environment Set by FCC μW/cm²	% of the Standard
Current PCS TDMA configuration	1100 feet away in front of the antenna	0.68	1000	0.068
Future PCS TDMA and GSM configuration	1100 feet away in front of the antenna	0.91	1000	0.091

In addition to predictive analysis, on-site data was recorded at different locations around the monopole. In all areas, less than 1.75 % of the MPE for public/uncontrolled limits was recorded. The reason the actual measurements are higher than the predicted values is because the actual measurements include emissions from the other carriers at that site while the theoretical study focused on the level of emissions contributed by AT&T only.

On-site measuring point	Worst Case Measured Value μW/cm²	Maximum Limit for PCS Band Uncontrolled Environment Set by FCC μW/cm²	% of the Standard
50 meters in front of sector 1	10.5	1000	1.05
20 meters in front of sector 2	17.5	1000	1.75
50 meters in front of sector 3	16.5	1000	1.65

The results of these analyses indicate that output power levels for the AT&T owned equipment deployed at the above referenced facility meets FCC approved exposure limits for all uncontrolled areas where general population exposure may exist. Thus, the maximum level of RF radiation in all uncontrolled areas (Assuming a worst case scenario and a 100 % duty cycle for all the transmitters.) is less than 1.75 % of the maximum permissible exposure limit mandated by the FCC and endorsed by the NCRP and ANSI/IEEE.

To the best of my knowledge, the statements made and information disclosed in this study are complete and accurate.

Sincerely,

Wireless Facilities, Inc.

Dan Hardiman

Senior Engineer II

Fixed Network Engineering



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051 Phone: (860) 827-2935 Fax: (860) 827-2950 E-Mail: siting.council@po.state.ct.us Web Site: www.state.ct.us/csc/index.htm

February 5, 2002

Honorable William W. Dickinson, Jr. Mayor
Town of Wallingford
Municipal Building
45 South Main Street
P. O. Box 427
Wallingford, CT 06492

RE: EM-AT&T-097-107-117-130-148-156-161-164-020124 - AT&T Wireless notice of intent to modify existing telecommunications facilities located at twelve sites throughout the State of

Connecticut.

Dear Mayor Dickinson:

The Connecticut Siting Council (Council) received this request to modify an existing telecommunications facility, pursuant to Regulations of Connecticut State Agencies Section 16-50j-72.

The Council will consider this item at the next meeting scheduled for February 14, 2002, at 1:30 p.m. in Hearing Room One, Ten Franklin Square, New Britain, Connecticut.

Please call me or inform the Council if you have any questions or comments regarding this proposal.

Thank you for your cooperation and consideration.

Very truly yours,

SI Derek Phelps / Executive Director

SDP/laf

Enclosure: Notice of Intent

c: Linda Bush, Town Planner, Town of Wallingford

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ROBERT C. SCHNEIDER
LOUIS R. TAFFERA

VIA FEDERAL EXPRESS

Hon. Mortimer Gelston, Chairman and Members of the Siting Council Connecticut Siting Council 10 Franklin Square New Britain, Connecticut 06051

Re: AT&T \

NEIL J. ALEXANDER (also CT)

THOMAS M. BLOOMER

JOSEPH P. CARLUCCI

KENNETH J. DUBROFF

SUSAN E.H. GORDON KAREN G. GRANIK JOSHUA J. GRAUER

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ROBERT FEDER

CHARLES T. BAZYDLO (also NJ) THOMAS R. BEIRNE (also DC)

CHRISTOPHER B. FISHER (also CT)

ANTHONY B. GIOFFRE III (also CT)

AT&T Wireless - TS-AT&T-148-991014 945 East Center Street, Wallingford, Connecticut Notice of Exempt Modification

January 23, 2002



Hon. Mortimer Gelston, Chairman and Members of the Siting Council:

On November 9, 1999 the Council ruled that AT&T's proposed shared use of the existing Sprint facility complied with Section 16-50aa of the Regulations of Connecticut State Agencies (TS-AT&T-164-991014) permitting AT&T to install three (3) panel antennas on a pipe mounted to the top of the tower, with an associated equipment shelter located within the fenced compound.

This notice of exempt modification is being provided pursuant to Section 16-50j-72 of the Council's regulations. AT&T will be installing additional equipment within the existing shelter at the facility. There will be no other infrastructure changes to AT&T's facility.

The proposed addition of equipment to AT&T Wireless' facility does not constitute a "modification" of an existing facility as defined in Connecticut General Statutes Section 16-50i(d). The proposed addition to AT&T Wireless' facility will not result in an increase in the Tower's height or extend the boundaries of the existing fenced area surrounding the Tower. Further, there will be no increase in noise levels by six (6) decibels or more at the Tower site's

January 23, 2002 Page 2

boundary. AT&T has made measurements of the existing facility to confirm compliance with MPE limits and as set forth in a report prepared by Wireless Facilities, Inc., annexed hereto, 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. For all the foregoing reasons, addition of AT&T Wireless' equipment to its existing facility constitutes an exempt modification which will not have a substantially adverse environmental effect.

AT&T Wireless respectfully submits that the proposed addition of equipment to the East Center Street Facility meets the Council's exemption criteria and requests an acknowledgment of same.

Respectfully Submitted,

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

cc: Mayor, Town of Wallingford

Darryl Hendrickson, Bechtel Telecommunications

Wireless Facilities, Inc. 1840 Michael Faraday Drive Suite 200 Reston, VA 20190

January 3, 2002

Mr. Mortimer A. Gelston, Chairman Connecticut Siting Council 10 Franklin Square New Britain, CT 06051

RE: FCC Compliance Statement for AT&T Site CT-148 (East Wallingford - Bowmont farm)

Dear Mr. Gelston:

On behalf of AT&T Wireless, Wireless Facilities Inc. has performed in-field RF measurements and office analyses for the above referenced site to determine compliance with FCC mandated Maximum Permissible Exposure (MPE) limits as defined in 47 CFR § 1.1310.

The table below gives a brief summary of the site location, its configuration and associated technical parameters.

Summary of the site configuration and technical parameters:

Site ID	CT-148	
Site Name	East Wallingford-Bowmont Farm	
Latitude	41.44333	
Longitude	-72.79611	
Address of structure	945 East Center Street	
	Wallingford,CT	
Type of structure	Monopole	
Antenna structure owner	AT&T Wireless services	
Address of antenna owner	15 East Midland Ave.	
	Paramus, NJ 07652	
FCC class and Type of service	PCS TDMA (IS-136), PCS GSM	
Operating frequency	D, E bands (PCS)	
Azimuths	60,180,300	
Elevation (ft)	140	
Antenna manufacturer	EMS	
Antenna type	Panel	

The mathematical equations used in evaluating the power density values are exactly as outlined in the Office of Engineering & Technology (OET) Bulletin Number 65 which contains the FCC guidelines for evaluating human exposure to radio-frequency electromagnetic fields.

In the case of a single radiating antenna, a prediction for power density in the far field of the antenna can be written as:

$$S = \frac{EIRP}{4\pi D^2} = \frac{1.64 * ERP}{4\pi D^2}$$

Where:

 $S = Power density in W/m^2$

EIRP = Effective isotropic radiated power (W)

ERP = Effective radiated power (W)

D = Distance in meters

Using the EPA's recommended factor of 1.6 for 100 % reflection, the worst case power density can be obtained by incorporating this factor into the above equation. If the distance, D, is in meters, the ERP is in Watts, then the worst case power density in μ W/cm² is given by

$$S = \frac{33.4 * ERP}{D^2}$$
 (Section 2, OET bulletin 65).

Where:

 $S = Power density in \mu W/cm^2$

ERP = Effective radiated power (W)

D = Distance in meters

WFI's analysis considered both the current configuration as well as the future GSM deployment AT&T is proposing. For the current configuration, both in-field measurements and a predictive analysis tool were used to determine compliance. For the future deployment, only a predictive analysis was performed. The maximum worst-case values of the power density for this analysis are outlined below:

Configuration	Point of Worst Case Predicted Level	Predicted Value μW/cm²	Maximum Limit for PCS Band Uncontrolled Environment Set by FCC μW/cm²	% of the Standard
Current PCS TDMA configuration	100 feet away in front of the antenna	0.51	1000	0.05
Future PCS TDMA and GSM configuration	130 feet away in front of the antenna	0.67	1000	0.07

In addition to predictive analysis, on-site data was recorded at different locations around the monopole. In all areas, less than or equal to 0.65 % of the MPE for public/uncontrolled limits was recorded. The reason the actual measurements are higher than the predicted values is because the actual measurements include emissions from the other carriers at that site while the theoretical study focused on the level of emissions contributed by AT&T only.

On-site measuring point	Worst Case Measured Value μW/cm²	Maximum Limit for PCS Band Uncontrolled Environment Set by FCC μW/cm²	% of the Standard
20 meters in front of sector 1	1.85	1000	0.185
10 meters in front of sector 2	6.5	1000	0.65
20 meters in front of sector 3	1	1000	0.1

The results of these analyses indicate that output power levels for the AT&T owned equipment deployed at the above referenced facility meets FCC approved exposure limits for all uncontrolled areas where general population exposure may exist. Thus, the maximum level of RF radiation in all uncontrolled areas (Assuming a worst case scenario and a 100 % duty cycle for all the transmitters.) is less than or equal to 0.65 % of the maximum permissible exposure limit mandated by the FCC and endorsed by the NCRP and ANSI/IEEE.

To the best of my knowledge, the statements made and information disclosed in this study are complete and accurate.

Sincerely,

Wireless Facilities, Inc.

Dan Hardiman

Senior Engineer II

Fixed Network Engineering

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VIA FEDERAL EXPRESS

Hon. Mortimer Gelston, Chairman and Members of the Siting Council
Connecticut Siting Council
10 Franklin Square
New Britain, Connecticut 06051

Re:

NEIL J. ALEXANDER (also CT)

THOMAS M. BLOOMER

JOSEPH P. CARLUCCI

KENNETH J. DUBROFF

SUSAN E.H. GORDON

WAYNE E. HELLER (also CT)

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CHARLES T. BAZYDLO (also NJ) THOMAS R. BEIRNE (also DC)

CHRISTOPHER B. FISHER (also CT)

ANTHONY B. GIOFFRE III (also CT)

AT&T Wireless - TS-AT&T-148-991213 Northup Road, Wallingford, Connecticut Notice of Exempt Modification January 23, 2002



Hon. Mortimer Gelston, Chairman and Members of the Siting Council:

On December 20, 1999 the Council ruled that AT&T's proposed shared use of the existing SpectraSite facility complied with Section 16-50aa of the Regulations of Connecticut State Agencies (TS-AT&T-148-991213) permitting AT&T to install up to twelve (12) panel antennas at the 115' level on the existing tower, with an associated equipment shelter located within the fenced compound.

This notice of exempt modification is being provided pursuant to Section 16-50j-72 of the Council's regulations. AT&T will be installing additional equipment within the existing shelter at the facility. There will be no other infrastructure changes to AT&T's facility.

The proposed addition of equipment to AT&T Wireless' facility does not constitute a "modification" of an existing facility as defined in Connecticut General Statutes Section 16-50i(d). The proposed addition to AT&T Wireless' facility will not result in an increase in the Tower's height or extend the boundaries of the existing fenced area surrounding the Tower. Further, there will be no increase in noise levels by six (6) decibels or more at the Tower site's boundary. AT&T has made measurements of the existing facility to confirm compliance with

January 23, 2002 Page 2

MPE limits and as set forth in a report prepared by Wireless Facilities, Inc., annexed hereto, 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. For all the foregoing reasons, addition of AT&T Wireless' equipment to its existing facility constitutes an exempt modification which will not have a substantially adverse environmental effect.

AT&T Wireless respectfully submits that the proposed addition of equipment to the Northrup Road Facility meets the Council's exemption criteria and requests an acknowledgment of same.

Respectfully Submitted,

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

cc: Mayor, Town of Wallingford

Darryl Hendrickson, Bechtel Telecommunications

Wireless Facilities, Inc. 1840 Michael Faraday Drive Suite 200 Reston, VA 20190

December 20, 2001

Mr. Mortimer A. Gelston, Chairman Connecticut Siting Council 10 Franklin Square New Britain, CT 06051

RE: FCC Compliance Statement for AT&T Site CT-113 (Wallingford NE Spectrasite)

Dear Mr. Gelston:

On behalf of AT&T Wireless, Wireless Facilities Inc. has performed in-field RF measurements and office analyses for the above referenced site to determine compliance with FCC mandated Maximum Permissible Exposure (MPE) limits as defined in 47 CFR § 1.1310.

The table below gives a brief summary of the site location, its configuration and associated technical parameters.

Summary of the site configuration and technical parameters:

Site ID	CT-113	
Site Name	Wallingford Spectrasite Monopole	
Latitude	41.48916	
Longitude	-72.76805	
Owner of the structure	Spectrasite	
Address of structure	922 Northrup road	
	Wallingford, CT	
Type of structure	Monopole	
Antenna structure owner	AT&T Wireless services	
Address of antenna owner	149 Water street, Norwalk, CT	
Antenna owner contact number	203-831-4010	
FCC class and Type of service	PCS TDMA (IS-136) and PCS GSM	
Operating frequency	D, E bands (PCS)	
Azimuths	30,150,270	
Elevation (ft)	115	
Antenna manufacturer	Allgon	
Antenna type	Panel	

The mathematical equations used in evaluating the power density values are exactly as outlined in the Office of Engineering & Technology (OET) Bulletin Number 65 which contains the FCC guidelines for evaluating human exposure to radio-frequency electromagnetic fields.

In the case of a single radiating antenna, a prediction for power density in the far field of the antenna can be written as:

$$S = \frac{EIRP}{4\pi D^2} = \frac{1.64 * ERP}{4\pi D^2}$$

Where

 $S = Power density in \mu W/cm^2$

EIRP = Effective isotropic radiated power (W)

ERP = Effective radiated power (W)

Using the EPA's recommended factor of 1.6 for 100 % reflection, the worst case power density can be obtained by incorporating this factor into the above equation. If the distance, D, is in meters, the ERP is in Watts, then the worst case power density in μ W/cm² is given by.

$$S = \frac{33.4 * ERP}{D^2}$$
 (Section 2, OET bulletin 65).

Where:

 $S = Power density in \mu W/cm^2$

ERP = Effective radiated power (W)

D = Distance in meters

WFI's analysis considered both the current configuration as well as the future GSM deployment AT&T is proposing. For the current configuration, both in-field measurements and a predictive analysis tool were used to determine compliance. For the future deployment, only a predictive analysis was performed. The maximum worst-case values of the power density for this analysis are outlined below:

Configuration	Theoretical Measuring point	predicted value μW/cm²	Maximum Limit for PCS band uncontrolled environment set by FCC μW/cm²	% of the standard
Current PCS TDMA configuration	240 feet away in front of the antenna	1.05	1000	0.1
Future PCS TDMA and GSM configuration	240 feet away in front of the antenna	1.22	1000	0.122

In addition to predictive analysis, on-site data was recorded at different locations around the monopole. In all areas, less than 0.21 % of the MPE for public/uncontrolled limits was recorded. The reason the actual measurements are higher than the predicted values is because the actual measurements include emissions from the other carriers at the site while the theoretical study focused on the level of emissions contributed by AT&T only.

On-site measuring point	Worst Case Measured Value μW/cm²	Maximum Limit for Cellular Band Uncontrolled Environment Set by FCC μW/cm²	% of the Standard
50 meters in front of sector 2	2	1000	0.2
40 meters in front of sector 3	2.1	1000	0.21

The results of these analyses indicate that output power levels for the AT&T owned equipment deployed at the above referenced facility meets FCC approved exposure limits for all uncontrolled areas where general population exposure may exist. Thus, the maximum level of RF radiation in all uncontrolled areas (Assuming a worst case scenario and a 100 % duty cycle for all the transmitters.) is less than 0.21 % of the maximum permissible exposure limit mandated by the FCC and endorsed by the NCRP and ANSI/IEEE.

To the best of my knowledge, the statements made and information disclosed in this study are complete and accurate.

Sincerely,

Wireless Facilities, Inc.

Navid Nawab

Senior Director

Fixed Network Engineering

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VIA FEDERAL EXPRESS

Hon. Mortimer Gelston, Chairman and Members of the Siting Council Connecticut Siting Council 10 Franklin Square New Britain, Connecticut 06051

Re:

NEIL J. ALEXANDER (also CT) CHARLES T. BAZYDLO (also NJ) THOMAS R. BEIRNE (also DC)

CHRISTOPHER B. FISHER (also CT)

ANTHONY B. GIOFFRE III (also CT)

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KENNETH F. JURIST

BARRY E. LONG

ROBERT FEDER

AT&T Wireless - TS-AT&T-148-991213

316 Woodhouse Avenue, Wallingford, Connecticut

Notice of Exempt Modification

January 23, 2002



Hon. Mortimer Gelston, Chairman and Members of the Siting Council:

On July 25, 2000 the Council ruled that AT&T's proposed shared use of the existing VoiceStream facility complied with Section 16-aa of the Regulations of Connecticut State Agencies (TS-AT&T-148-000703) permitting AT&T to install up to twelve (12) panel antennas at the 128' level on the existing tower, with associated equipment cabinets located on a 8' x 15'6" concrete pad within the fenced compound.

This notice of exempt modification is being provided pursuant to Section 16-50j-72 of the Council's regulations. AT&T will be installing an additional equipment cabinet (approximately 76"H x 76"W x 30"D) on AT&T's existing concrete pad at the facility. There will be no other infrastructure changes to AT&T's facility.

The proposed addition of an equipment cabinet to AT&T Wireless' facility does not constitute a "modification" of an existing facility as defined in Connecticut General Statutes Section 16-50i(d). The proposed addition to AT&T Wireless' facility will not result in an increase in the Tower's height or extend the boundaries of the existing fenced area surrounding the Tower. Further, there will be no increase in noise levels by six (6) decibels or more at the

January 23, 2002 Page 2

Tower site's boundary. AT&T made measurements of the existing facility to confirm compliance with MPE limits and as set forth in a report prepared by Wireless Facilities, Inc., annexed hereto, 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. For all the foregoing reasons, addition of AT&T Wireless' cabinet to its existing facility constitutes an exempt modification which will not have a substantially adverse environmental effect.

AT&T Wireless respectfully submits that the proposed addition of the cabinet to the Woodhouse Avenue Facility meets the Council's exemption criteria and requests an acknowledgment of same.

Respectfully Submitted,

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

cc: Mayor, Town of Wallingford

Darryl Hendrickson, Bechtel Telecommunications

Brendan Sharkey, VoiceStream

Wireless Facilities, Inc. 1840 Michael Faraday Drive Suite 200 Reston, VA 20190

December 20, 2001

Mr. Mortimer A. Gelston, Chairman Connecticut Siting Council 10 Franklin Square New Britain, CT 06051

RE: FCC Compliance Statement for AT&T Site CT-111 (East Wallingford Voicestream Monopole)

Dear Mr. Gelston:

On behalf of AT&T Wireless, Wireless Facilities Inc. has performed in-field RF measurements and office analyses for the above referenced site to determine compliance with FCC mandated Maximum Permissible Exposure (MPE) limits as defined in 47 CFR § 1.1310.

The table below gives a brief summary of the site location, its configuration and associated technical parameters.

Summary of the site configuration and technical parameters:

Site ID	CT-111	
Site Name	East Wallingford Voicestream	
	Monopole	
Latitude	41.43388	
Longitude	-72.80166	
Owner of the structure	Voicestream	
Address of structure	316 Woodhouse Ave	
	Wallingford, CT	
Type of structure	Monopole	
Antenna structure owner	AT&T Wireless services	
Address of antenna owner	149 Water street, Norwalk, CT	
Antenna owner contact number	203-831-4010	
FCC class and Type of service	PCS TDMA (IS-136)	
	PCS GSM	
Operating frequency	D, E bands (PCS)	
Azimuths	30,150,270	
Elevation (ft)	128	
Antenna manufacturer	Allgon	
Antenna type	Panel	

The mathematical equations used in evaluating the power density values are exactly as outlined in the Office of Engineering & Technology (OET) Bulletin Number 65 which contains the FCC guidelines for evaluating human exposure to radio-frequency electromagnetic fields.

In the case of a single radiating antenna, a prediction for power density in the far field of the antenna can be written as:

$$S = \frac{EIRP}{4\pi D^2} = \frac{1.64 * ERP}{4\pi D^2}$$

Where

 $S = Power density in \mu W/cm^2$

EIRP = Effective isotropic radiated power (W)

ERP = Effective radiated power (W)

Using the EPA's recommended factor of 1.6 for 100 % reflection, the worst case power density can be obtained by incorporating this factor into the above equation. If the distance, D, is in meters, the ERP is in Watts, then the worst case power density in μ W/cm² is given by.

$$S = \frac{33.4 * ERP}{D^2}$$
 (Section 2, OET bulletin 65).

Where:

 $S = Power density in \mu W/cm^2$

ERP = Effective radiated power (W)

D = Distance in meters

WFI's analysis considered both the current configuration as well as the future GSM deployment AT&T is proposing. For the current configuration, both in-field measurements and a predictive analysis tool were used to determine compliance. For the future deployment, only a predictive analysis was performed. The maximum worst-case values of the power density for this analysis are outlined below:

Configuration	Theoretical Measuring point	predicted value μW/cm²	Maximum Limit for PCS band uncontrolled environment set by FCC μW/cm²	% of the standard
Current PCS TDMA configuration	240 feet away in front of the antenna	1.05	1000	0.1
Future PCS TDMA and GSM configuration	240 feet away in front of the antenna	1.22	1000	0.122

In addition to predictive analysis, on-site data was recorded at different locations around the monopole. In all areas, less than 2.5 % of the MPE for public/uncontrolled limits was recorded. The reason the actual measurements are higher than the predicted values is because the actual measurements include emissions from the other carriers at the site while the theoretical study focused on the level of emissions contributed by AT&T only.

On-site measuring point	Worst Case Measured Value μW/cm²	Maximum Limit for Cellular Band Uncontrolled Environment Set by FCC μW/cm²	% of the Standard
30 meters in front of sector 1	25	1000	2.5
30 meters in front of sector 2	10	1000	1.0
50 meters in front of sector 3	1.5	1000	0.15

The results of these analyses indicate that output power levels for the AT&T owned equipment deployed at the above referenced facility meets FCC approved exposure limits for all uncontrolled areas where general population exposure may exist. Thus, the maximum level of RF radiation in all uncontrolled areas (Assuming a worst case scenario and a 100 % duty cycle for all the transmitters.) is less than 2.5 % of the maximum permissible exposure limit mandated by the FCC and endorsed by the NCRP and ANSI/IEEE.

To the best of my knowledge, the statements made and information disclosed in this study are complete and accurate.

Sincerely,

Wireless Facilities, Inc.

Navid Nawab

Senior Director

Fixed Network Engineering



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051
Phone: (860) 827-2935 Fax: (860) 827-2950
E-Mail: siting.council@po.state.ct.us
Web Site: www.state.ct.us/csc/index.htm

February 5, 2002

Honorable H. Richard Borer, Jr. Mayor City of West Haven City Hall 355 Main Street West Haven, CT 06516

RE:

EM-AT&T-097-107-117-130-148-156-161-164-020124 - AT&T Wireless notice of intent to modify existing telecommunications facilities located at twelve sites throughout the State of Connecticut.

Dear Mayor Borer:

The Connecticut Siting Council (Council) received this request to modify an existing telecommunications facility, pursuant to Regulations of Connecticut State Agencies Section 16-50j-72.

The Council will consider this item at the next meeting scheduled for February 14, 2002, at 1:30 p.m. in Hearing Room One, Ten Franklin Square, New Britain, Connecticut.

Please call me or inform the Council if you have any questions or comments regarding this proposal.

Thank you for your cooperation and consideration.

Very truly yours.

Executive Director

SDP/laf

Enclosure: Notice of Intent

c: James Hill, City Planner, City of West Haven

90 MAPLE AVENUE WHITE PLAINS, NEW YORK 10601-5196

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VIA FEDERAL EXPRESS

Hon. Mortimer Gelston, Chairman and Members of the Siting Council Connecticut Siting Council 10 Franklin Square New Britain, Connecticut 06051

Re:

NEIL J. ALEXANDER (also CT) CHARLES T. BAZYDLO (also NJ)

THOMAS R. BEIRNE (also DC)

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BARRY E. LONG

MICHAEL L. KATZ (also NJ)

DANIEL F. LEARY (also CT)

JOSHUA E. KIMERLING (also CT)

ROBERT FEDER

AT&T Wireless - EM-AT&T-156-990920 1 Burwell Road, West Haven, Connecticut Notice of Further Exempt Modification January 23, 2002



Hon. Mortimer Gelston, Chairman and Members of the Siting Council:

Springwich Cellular Limited Partnership is the owner of the existing communications tower and related facility located at 1 Burwell Road, West Haven, Connecticut. On October 18, 1999 AT&T Wireless ("AT&T"), received the Council's acknowledgement of a notice to modify the existing facility pursuant to Section 16-50j-72 of the Regulations of Connecticut State Agencies (EM-AT&T-156-990920) permitting AT&T to install up to twelve (12) panel antennas at the 130' level on the existing tower, with an associated equipment shelter located within the fenced compound.

This notice of further exempt modification is also being provided pursuant to Section 16-50j-72 of the Council's regulations. AT&T will be installing additional equipment within the existing shelter at the facility. There will be no other infrastructure changes to AT&T's facility.

The proposed addition of equipment to AT&T Wireless' facility does not constitute a "modification" of an existing facility as defined in Connecticut General Statutes Section 16-50i(d). The proposed addition to AT&T Wireless' facility will not result in an increase in the Tower's height or extend the boundaries of the existing fenced area surrounding the Tower.

January 23, 2002 Page 2

Further, there will be no increase in noise levels by six (6) decibels or more at the Tower site's boundary. AT&T made measurements of the existing facility to confirm compliance with MPE limits and as set forth in a report prepared by Wireless Facilities, Inc., annexed hereto, 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. For all the foregoing reasons, addition of AT&T Wireless' equipment to its existing facility constitutes an exempt modification which will not have a substantially adverse environmental effect.

AT&T Wireless respectfully submits that the proposed addition of the equipment to the Burwell Road Facility meets the Council's exemption criteria and requests an acknowledgment of same.

Respectfully Submitted,

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

cc: Mayor, City of West Haven

Darryl Hendrickson, Bechtel Telecommunications

Peter W. Van Wilgen, Springwich Cellular LP



Wireless Facilities, Inc. 1840 Michael Faraday Drive Suite 200 Reston, VA 20190

December 19, 2001

Mr. Mortimer A. Gelston, Chairman Connecticut Siting Council 10 Franklin Square New Britain, CT 06051

RE: FCC Compliance Statement for AT&T Site CT-103 (West Haven North-SNET tower)

Dear Mr. Gelston:

On behalf of AT&T Wireless, Wireless Facilities Inc. has performed in-field RF measurements and office analyses for the above referenced site to determine compliance with FCC mandated Maximum Permissible Exposure (MPE) limits as defined in 47 CFR § 1.1310.

The table below gives a brief summary of the site location, its configuration and associated technical parameters.

Summary of the site configuration and technical parameters:

Site ID	CT-103	
Site Name	West Haven Tower-SNET North	
Latitude	41.29527	
Longitude	-72.97388	
Address of structure	1 Burwell street	
	New Haven, CT	
Type of structure	Tower	
Antenna structure owner	AT&T Wireless services	
Address of antenna owner	149 Water street,	
	Norwalk, CT	
FCC class and Type of service	PCS TDMA (IS-136)	
Operating frequency	D, E bands (PCS)	
Azimuths	30,150,270	
Elevation (ft)	130	
Antenna manufacturer	Allgon	
Antenna type	Panel	

The mathematical equations used in evaluating the power density values are exactly as outlined in the Office of Engineering & Technology (OET) Bulletin Number 65 which contains the FCC guidelines for evaluating human exposure to radio-frequency electromagnetic fields.

In the case of a single radiating antenna, a prediction for power density in the far field of the antenna can be written as:

$$S = \frac{EIRP}{4\pi D^2} = \frac{1.64 * ERP}{4\pi D^2}$$

Where:

 $S = Power density in W/m^2$

EIRP = Effective isotropic radiated power (W)

ERP = Effective radiated power (W)

D = Distance in meters

Using the EPA's recommended factor of 1.6 for 100 % reflection, the worst case power density can be obtained by incorporating this factor into the above equation. If the distance, D, is in meters, the ERP is in Watts, then the worst case power density in μ W/cm² is given by

$$S = \frac{33.4 * ERP}{D^2}$$
 (Section 2, OET bulletin 65).

Where:

 $S = Power density in \mu W/cm^2$

ERP = Effective radiated power (W)

D = Distance in meters

WFI's analysis considered both the current configuration as well as the future GSM deployment AT&T is proposing. For the current configuration, both in-field measurements and a predictive analysis tool were used to determine compliance. For the future deployment, only a predictive analysis was performed. The maximum worst-case values of the power density for this analysis are outlined below:

Configuration	Point of Worst Case Predicted Level	Predicted Value μW/cm²	Maximum Limit for PCS Band Uncontrolled Environment Set by FCC μW/cm²	% of the Standard
Current PCS TDMA configuration	290 feet away in front of the antenna	0.82	1000	0.08
Future PCS TDMA and GSM configuration	290 feet away in front of the antenna	0.96	1000	0.096

In addition to predictive analysis, on-site data was recorded at different locations around the Lattice Tower. In all areas, less than 1.4 % of the MPE for public/uncontrolled limits was recorded. The reason the actual measurements are higher than the predicted values is because the actual measurements include emissions from all the existing carriers at that site while the theoretical study focused on the level of emissions contributed by AT&T only.

On-site measuring point	Worst Case Measured Value μW/cm²	Maximum Limit for PCS Band Uncontrolled Environment Set by FCC μW/cm²	% of the Standard
40 meters in front of sector 1	4.5	1000	0.45
50 meters in front of sector 2	14	1000	1.4
100 meters in front of sector 3	4.5	1000	0.45

The results of these analyses indicate that output power levels for the AT&T owned equipment deployed at the above referenced facility meets FCC approved exposure limits for all uncontrolled areas where general population exposure may exist. Thus, the maximum level of RF radiation in all uncontrolled areas (Assuming a worst case scenario and a 100 % duty cycle for all the transmitters.) is less than 1.4 % of the maximum permissible exposure limit mandated by the FCC and endorsed by the NCRP and ANSI/IEEE.

To the best of my knowledge, the statements made and information disclosed in this study are complete and accurate.

Sincerely,

Wireless Facilities, Inc.

Dan Hardiman

Senior Engineer II

Fixed Network Engineering



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051 Phone: (860) 827-2935 Fax: (860) 827-2950 E-Mail: siting.council@po.state.ct.us Web Site: www.state.ct.us/csc/index.htm

February 5, 2002

Honorable Paul F. Hannah, Jr. First Selectman Town of Wilton Town Hall 238 Danbury Road Wilton, CT 06897

RE: EM-AT&T-097-107-117-130-148-156-161-164-020124 - AT&T Wireless notice of intent to modify existing telecommunications facilities located at twelve sites throughout the State of Connecticut.

Dear Mr. Hannah:

The Connecticut Siting Council (Council) received this request to modify an existing telecommunications facility, pursuant to Regulations of Connecticut State Agencies Section 16-50j-72.

The Council will consider this item at the next meeting scheduled for February 14, 2002, at 1:30 p.m. in Hearing Room One, Ten Franklin Square, New Britain, Connecticut.

Please call me or inform the Council if you have any questions or comments regarding this proposal.

Thank you for your cooperation and consideration.

Very truly yours,

S. Derek Phelps
Executive Director

SDP/laf

Enclosure: Notice of Intent

c: Wendy Johnston, Town Planner, Town of Wilton

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ROBERT L. OSAR (also TX)
MARYANN M. PALERMO
ROBERT C. SCHNEIDER
LOUIS R. TAFFERA

January 23, 2002

VIA FEDERAL EXPRESS

Hon. Mortimer Gelston, Chairman and Members of the Siting Council
Connecticut Siting Council
10 Franklin Square
New Britain, Connecticut 06051

Re:

NEIL J. ALEXANDER (also CT)

THOMAS R. BEIRNE (also DC)

THOMAS M. BLOOMER

JOSEPH P. CARLUCCI

KENNETH J. DUBROFF

SUSAN E.H. GORDON

KENNETH F. JURIST

BARRY E. LONG

WAYNE E. HELLER (also CT)

MICHAEL L. KATZ (also NJ)

DANIEL F. LEARY (also CT)

JOSHUA E. KIMERLING (also CT)

KAREN G. GRANIK JOSHUA J. GRAUER

ROBERT FEDER

CHARLES T. BAZYDLO (also NJ)

CHRISTOPHER B. FISHER (also CT)

ANTHONY B. GIOFFRE III (also CT)

AT&T Wireless - EM-CROWN-161-000831 128 Mather Street, Wilton, Connecticut Notice of Further Exempt Modification



Hon. Mortimer Gelston, Chairman and Members of the Siting Council:

Crown Atlantic Company LLC ("Crown") holds the Siting Council certificate for the existing communications tower and related facility located at 128 Mather Street, Wilton, Connecticut (Docket No. 94). On September 19, 2000 Crown, on behalf of AT&T Wireless ("AT&T"), received the Council's acknowledgement of a notice to modify the existing facility pursuant to Section 16-50j-72 of the Regulations of Connecticut State Agencies (EM-CROWN-161-000831) permitting AT&T to install nine (9) panel antennas at the 173' level on the existing tower, with associated equipment cabinets located on a 14' x 8' concrete pad within the fenced compound.

This notice of further exempt modification is also being provided pursuant to Section 16-50j-72 of the Council's regulations. AT&T will be installing an additional equipment cabinet (approximately 76" X 76" X 30"D) on AT&T's existing concrete pad at the facility. There will be no other infrastructure changes to AT&T's facility.

The proposed addition of an equipment cabinet to AT&T Wireless' facility does not constitute a "modification" of an existing facility as defined in Connecticut General Statutes

January 23, 2002 Page 2

Section 16-50i(d). The proposed addition to AT&T Wireless' facility will not result in an increase in the Tower's height or extend the boundaries of the existing fenced area surrounding the Tower. Further, there will be no increase in noise levels by six (6) decibels or more at the Tower site's boundary. AT&T made measurements of the existing facility to confirm compliance with MPE limits and as set forth in a report prepared by Wireless Facilities, Inc., annexed hereto, 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. For all the foregoing reasons, addition of AT&T Wireless' cabinet to its existing facility constitutes an exempt modification which will not have a substantially adverse environmental effect.

AT&T Wireless respectfully submits that the proposed addition of the cabinet to the Mather Street Facility meets the Council's exemption criteria and requests an acknowledgment of same.

Respectfully Submitted,

Christopher B. Fisher, Esq.

On behalf of AT&T Wireless First Selectman, Town of Wilton

Darryl Hendrickson, Bechtel Telecommunications Kenneth C. Baldwin, Robinson & Cole

cc:

Wireless Facilities, Inc. 1840 Michael Faraday Drive Suite 200 Reston, VA 20190

January 2, 2002

Mr. Mortimer A. Gelston, Chairman Connecticut Siting Council 10 Franklin Square New Britain, CT 06051

RE: FCC Compliance Statement for AT&T Site CT-062 (Wilton East Central)

Dear Mr. Gelston:

On behalf of AT&T Wireless, Wireless Facilities Inc. has performed in-field RF measurements and office analyses for the above referenced site to determine compliance with FCC mandated Maximum Permissible Exposure (MPE) limits as defined in 47 CFR § 1.1310.

The table below gives a brief summary of the site location, its configuration and associated technical parameters.

Summary of the site configuration and technical parameters:

Site ID	CT-062	
Site Name	Wilton East Central	
Latitude	41.23833	
Longitude	-73.42444	
Address of structure	128 Mather Street,	
TD 6 /	Wilton, CT	
Type of structure	Tower	
Antenna structure owner	AT&T Wireless services	
Address of antenna owner	15 East Midland Ave,	
	Paramus, NJ 07652	
FCC class and Type of service	PCS TDMA (IS-136)	
	PCS GSM	
Operating frequency	D, E bands (PCS)	
Azimuths	60,180,300	
Elevation (ft)	173	
Antenna manufacturer	EMS	
Antenna type	Panel	

The mathematical equations used in evaluating the power density values are exactly as outlined in the Office of Engineering & Technology (OET) Bulletin Number 65 which contains the FCC guidelines for evaluating human exposure to radio-frequency electromagnetic fields.

In the case of a single radiating antenna, a prediction for power density in the far field of the antenna can be written as:

$$S = \frac{EIRP}{4\pi D^2} = \frac{1.64 * ERP}{4\pi D^2}$$

Where:

 $S = Power density in W/m^2$

EIRP = Effective isotropic radiated power (W)

ERP = Effective radiated power (W)

D = Distance in meters

Using the EPA's recommended factor of 1.6 for 100 % reflection, the worst case power density can be obtained by incorporating this factor into the above equation. If the distance, D, is in meters, the ERP is in Watts, then the worst case power density in μ W/cm² is given by

$$S = \frac{33.4 * ERP}{D^2}$$
 (Section 2, OET bulletin 65).

Where:

 $S = Power density in \mu W/cm^2$

ERP = Effective radiated power (W)

D = Distance in meters

WFI's analysis considered both the current configuration as well as the future GSM deployment AT&T is proposing. For the current configuration, both in-field measurements and a predictive analysis tool were used to determine compliance. For the future deployment, only a predictive analysis was performed. The maximum worst-case values of the power density for this analysis are outlined below:

Configuration	Point of Worst Case Predicted Level	Predicted Value μW/cm²	Maximum Limit for PCS Band Uncontrolled Environment Set by FCC μW/cm²	% of the Standard
Current PCS TDMA configuration	1500 feet away in front of the antenna	0.26	1000	0.026
Future PCS TDMA and GSM configuration	1500 feet away in front of the antenna	0.35	1000	0.035

In addition to predictive analysis, on-site data was recorded at different locations around the Lattice Tower. In all areas, less than or equal to 1.85 % of the MPE for public/uncontrolled limits was recorded. The reason the actual measurements are higher than the predicted values is because the actual measurements include emissions from all the existing carriers at that site while the theoretical study focused on the level of emissions contributed by AT&T only.

On-site measuring point	Worst Case Measured Value μW/cm²	Maximum Limit for PCS Band Uncontrolled Environment Set by FCC μW/cm²	% of the Standard
10 meters in front of sector 1	10.5	1000	1.05
15 meters in front of sector 2	18.5	1000	1.85
10 meters in front of sector 3	14	1000	1.4

The results of these analyses indicate that output power levels for the AT&T owned equipment deployed at the above referenced facility meets FCC approved exposure limits for all uncontrolled areas where general population exposure may exist. Thus, the maximum level of RF radiation in all uncontrolled areas (Assuming a worst case scenario and a 100 % duty cycle for all the transmitters.) is less than or equal to 1.85 % of the maximum permissible exposure limit mandated by the FCC and endorsed by the NCRP and ANSI/IEEE.

To the best of my knowledge, the statements made and information disclosed in this study are complete and accurate.

Sincerely,

Wireless Facilities, Inc.

Dan Hardiman

Senior Engineer II

Fixed Network Engineering



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

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Web Site: www.state.ct.us/csc/index.htm

February 5, 2002

Honorable Mary Hogan Mayor Town of Windsor Town Hall 275 Broad Street Windsor, CT 06095-0472

RE:

EM-AT&T-097-107-117-130-148-156-161-164-020124 - AT&T Wireless notice of intent to modify existing telecommunications facilities located at twelve sites throughout the State of Connecticut.

Dear Mayor Hogan:

The Connecticut Siting Council (Council) received this request to modify an existing telecommunications facility, pursuant to Regulations of Connecticut State Agencies Section 16-50j-72.

The Council will consider this item at the next meeting scheduled for February 14, 2002, at 1:30 p.m. in Hearing Room One, Ten Franklin Square, New Britain, Connecticut.

Please call me or inform the Council if you have any questions or comments regarding this proposal.

Thank you for your cooperation and consideration.

Very truly yours,

Executive Director

SDP/laf

Enclosure: Notice of Intent

c: Mario Zavarella, Town Planner, Town of Windsor R. Leon Churchill, Jr., Town Manager, Town of Windsor

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BARRY E. LONG

ROBERT FEDER

Hon. Mortimer Gelston, Chairman and Members of the Siting Council
Connecticut Siting Council
10 Franklin Square
New Britain, Connecticut 06051

Re: AT&T Wireless - TS-AT&T-164-991014

440 Hayden Station Road, Windsor, Connecticut

Notice of Exempt Modification

Hon. Mortimer Gelston, Chairman and Members of the Siting Council:

On November 9, 1999 the Council ruled that AT&T's proposed shared use of the existing Sprint facility complied with Section 16-50aa of the Regulations of Connecticut State Agencies (TS-AT&T-164-991014) permitting AT&T to install three (3) panel antennas on a pipe mounted to the top of the tower, with an associated equipment shelter located within the fenced compound.

This notice of exempt modification is being provided pursuant to Section 16-50j-72 of the Council's regulations. AT&T will be installing additional equipment within the existing shelter at the facility. There will be no other infrastructure changes to AT&T's facility.

The proposed addition of equipment to AT&T Wireless' facility does not constitute a "modification" of an existing facility as defined in Connecticut General Statutes Section 16-50i(d). The proposed addition to AT&T Wireless' facility will not result in an increase in the Tower's height or extend the boundaries of the existing fenced area surrounding the Tower. Further, there will be no increase in noise levels by six (6) decibels or more at the Tower site's

January 23, 2002 Page 2

boundary. AT&T has made measurements of the existing facility to confirm compliance with MPE limits and as set forth in a report prepared by Wireless Facilities, Inc., annexed hereto, 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. For all the foregoing reasons, addition of AT&T Wireless' equipment to its existing facility constitutes an exempt modification which will not have a substantially adverse environmental effect.

AT&T Wireless respectfully submits that the proposed addition of equipment to the Hayden Station Road Facility meets the Council's exemption criteria and requests an acknowledgment of same.

Respectfully Submitted,

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

cc: Mayor, Town of Windsor

Darryl Hendrickson, Bechtel Telecommunications

Wireless Facilities, Inc. 1840 Michael Faraday Drive Suite 200 Reston, VA 20190

December 19, 2001

Mr. Mortimer A. Gelston, Chairman Connecticut Siting Council 10 Franklin Square New Britain, CT 06051

RE: FCC Compliance Statement for AT&T Site CT-140 (Windsor North)

Dear Mr. Gelston:

On behalf of AT&T Wireless, Wireless Facilities Inc. has performed in-field RF measurements and office analyses for the above referenced site to determine compliance with FCC mandated Maximum Permissible Exposure (MPE) limits as defined in 47 CFR § 1.1310.

The table below gives a brief summary of the site location, its configuration and associated technical parameters.

Summary of the site configuration and technical parameters:

Site ID	CT-140	
Site Name	Windsor North	
Latitude	41.89777	
Longitude	-72.645	
Address of structure	440 Hayden station rd Windsor, CT 06095	
Type of structure	Monopole	
Antenna structure owner	AT&T Wireless services	
Address of antenna owner	149 Water street,	
	Norwalk, CT	
FCC class and Type of service	PCS TDMA (IS-136)	
Operating frequency	D, E bands (PCS)	
Azimuths	45,165,285	
Elevation (ft)	93	
Antenna manufacturer	EMS Wireless	
Antenna type	Panel	

The mathematical equations used in evaluating the power density values are exactly as outlined in the Office of Engineering & Technology (OET) Bulletin Number 65 which contains the FCC guidelines for evaluating human exposure to radio-frequency electromagnetic fields.

In the case of a single radiating antenna, a prediction for power density in the far field of the antenna can be written as:

$$S = \frac{EIRP}{4\pi D^2} = \frac{1.64 * ERP}{4\pi D^2}$$

Where:

 $S = Power density in W/m^2$

EIRP = Effective isotropic radiated power (W)

ERP = Effective radiated power (W)

D = Distance in meters

Using the EPA's recommended factor of 1.6 for 100 % reflection, the worst case power density can be obtained by incorporating this factor into the above equation. If the distance, D, is in meters, the ERP is in Watts, then the worst case power density in μ W/cm² is given by

$$S = \frac{33.4 * ERP}{D^2}$$
 (Section 2, OET bulletin 65).

Where:

 $S = Power density in \mu W/cm^2$

ERP = Effective radiated power (W)

D = Distance in meters

WFI's analysis considered both the current configuration as well as the future GSM deployment AT&T is proposing. For the current configuration, both in-field measurements and a predictive analysis tool were used to determine compliance. For the future deployment, only a predictive analysis was performed. The maximum worst-case values of the power density for this analysis are outlined below:

Configuration	Point of Worst Case Predicted Level	Predicted Value μW/cm²	Maximum Limit for PCS Band Uncontrolled Environment Set by FCC μW/cm²	% of the Standard
Current PCS TDMA configuration	120 feet away in front of the antenna	1.12	1000	0.112
Future PCS TDMA and GSM configuration	120 feet away in front of the antenna	1.5	1000	0.15

In addition to predictive analysis, on-site data was recorded at different locations around the monopole. In all areas, less than 1.3 % of the MPE for public/uncontrolled limits was recorded. The reason the actual measurements are higher than the predicted values is because the actual measurements include emissions from the other carriers at that site while the theoretical study focused on the level of emissions contributed by AT&T only.

On-site measuring point	Worst Case Measured Value μW/cm²	Maximum Limit for PCS Band Uncontrolled Environment Set by FCC μW/cm²	% of the Standard
35 meters in front of sector 1	13	1000	1.3
18 meters in front of sector 2	13	1000	1.3
15 meters in front of sector 3	7.5	1000	0.75

The results of these analyses indicate that output power levels for the AT&T owned equipment deployed at the above referenced facility meets FCC approved exposure limits for all uncontrolled areas where general population exposure may exist. Thus, the maximum level of RF radiation in all uncontrolled areas (Assuming a worst case scenario and a 100 % duty cycle for all the transmitters.) is less than 1.3 % of the maximum permissible exposure limit mandated by the FCC and endorsed by the NCRP and ANSI/IEEE.

To the best of my knowledge, the statements made and information disclosed in this study are complete and accurate.

Sincerely,

Wireless Facilities, Inc.

Dan Hardiman

Senior Engineer II

Fixed Network Engineering