



STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Ten Franklin Square
New Britain, Connecticut 06051
Phone: (860) 827-2935
Fax: (860) 827-2950

March 12, 2002

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

RE: **EM-AT&T-057-103-118-020220** - AT&T Wireless notice of intent to modify existing telecommunications facilities located in Greenwich, Norwalk, and Ridgefield, Connecticut.

Dear Attorney Fisher:

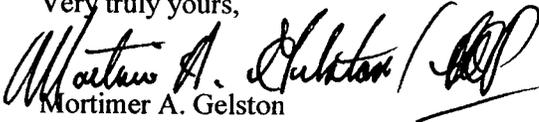
At a public meeting held on March 7, 2002, the Connecticut Siting Council (Council) acknowledged your notice to modify these existing telecommunications facilities, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies.

The proposed modifications are to be implemented as specified here and in your notice dated February 11, 2002. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility sites that would not increase tower heights, extend the boundaries of the tower site, increase noise levels at the tower site boundaries by six decibels, and increase the total radio frequencies electromagnetic radiation power density 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/laf

c: Honorable Lolly H. Prince, First Selectman, Town of Greenwich
Diane Fox, Town Planner, Town of Greenwich
Rudolph P. Marconi, First Selectman, Town of Ridgefield
Oswald Inglese, Town Planner, Town of Ridgefield
Alex A. Knopp, Mayor, City of Norwalk
Stephen Thomas, Planning Chairman, City of Norwalk

CUDDY & FEDER & WORBY LLP

90 MAPLE AVENUE
WHITE PLAINS, NEW YORK 10601-5196

(914) 761-1300

TELECOPIER (914) 761-5372/6405

www.cfwlaw.com

500 FIFTH AVENUE
NEW YORK, NEW YORK 10110
(212) 944-2841
TELECOPIER (212) 944-2843

WESTAGE BUSINESS CENTER
300 SOUTH LAKE DRIVE
FISHKILL, NEW YORK 12524
(845) 896-2229
TELECOPIER (845) 896-3672

STAMFORD, CONNECTICUT
NORWALK, CONNECTICUT

CUDDY & FEDER
1971-1995

WILLIAM S. NULL
DAWN M. PORTNEY
ELISABETH N. RADOW
NEIL T. RIMSKY
RUTH E. ROTH
JENNIFER L. VAN TUYL
CHAUNCEY L. WALKER (also CA)
ROBERT L. WOLFE
DAVID E. WORBY

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

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



February 19, 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
Cooper Hill Road, Ridgefield, Connecticut
Will Russ Court, Norwalk, Connecticut
Sound Beach Avenue, Greenwich, 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.

CUDDY & FEDER & WORBY LLP

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

(914) 761-1300
TELECOPIER (914) 761-5372/6405
www.cfwlaw.com

500 FIFTH AVENUE
NEW YORK, NEW YORK 10110
(212) 944-2841
TELECOPIER (212) 944-2843

WESTAGE BUSINESS CENTER
300 SOUTH LAKE DRIVE
FISHKILL, NEW YORK 12524
(845) 896-2229
TELECOPIER (845) 896-3672

STAMFORD, CONNECTICUT
NORWALK, CONNECTICUT

WILLIAM S. NULL
DAWN M. PORTNEY
ELISABETH N. RADOW
NEIL T. RIMSKY
RUTH E. ROTH
JENNIFER L. VAN TUYL
CHAUNCEY L. WALKER (also CA)
ROBERT L. WOLFE
DAVID E. WORBY

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

February 11, 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 - Petition No. 467
Sound Beach Avenue,
Greenwich, Connecticut
Notice of Exempt Modification

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

On June 20, 2000 the Council determined that AT&T's proposed installation on an existing CL&P electric transmission facility would not require a Certificate of Environmental Compatibility and Public Need (Petition No. 467) pursuant to Section 16-50g. et seq. of the General Statutes of Connecticut. AT&T's existing facility consists of six panel antennas on a 14" diameter extension mast on existing CL&P transmission line structure number 1255 with an associated equipment shelter at the base of the structure located off Sound Beach Avenue in Greenwich, Connecticut.

At this time, AT&T is notifying the Connecticut Siting Council of its intent to modify the existing facility pursuant to Section 16-50j-72 of the Regulations of Connecticut State Agencies. 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.

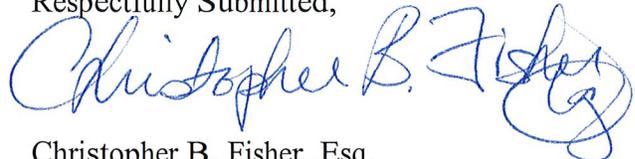
February 11, 2002

Page 2

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. Moreover, the additional channels being deployed by AT&T at the facility together with existing channels at the site will not result in power densities exceeding the "worst case" for AT&T as originally set forth in Petition No. 467. 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.

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

Respectfully Submitted,



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

cc: First Selectman, Town of Greenwich
Darryl Hendrickson, Bechtel Telecommunications



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

February 5, 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-150 (Old Greenwich Railroad station –NU pole)

Dear Mr. Gelston:

On behalf of AT&T Wireless, Wireless Facilities Inc. has performed 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-150
Site Name	Old Greenwich Railroad Station-NU Pole.
Latitude	41.03388
Longitude	-73.56333
Address of structure	Old Greenwich Railroad Station Sound Beach Ave Greenwich, CT
Type of structure	Power pole
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	0,120,240
Elevation (ft)	105
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/m²
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 $\mu\text{W}/\text{cm}^2$ is given by

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

Where: S = Power density in $\mu\text{W}/\text{cm}^2$
ERP = Effective radiated power (W)
D = Distance in meters

The calculations for the power density measurement make the following assumptions:

- ◆ WFI's analysis considered all the antennas for the current existing and the future GSM deployment AT&T is proposing.
- ◆ The formula utilized for the calculation is taken from the FCC recommended OET bulletin 65 (shown above).
- ◆ The worst case scenario was assumed with all the antennas for both the current and the future installation pointing to the base of the tower.
- ◆ A 100 % duty cycle with maximum power and the maximum number of channels (8 channels and 119.1 Watts maximum ERP per channel for the TDMA system and 2 channels and 275 Watts maximum ERP per channel for the GSM system) was assumed.

The maximum worst-case values of the power density for this analysis are outlined below:

Configuration	Point of Worst Case Predicted Level	Predicted Value $\mu\text{W}/\text{cm}^2$	Maximum Limit for PCS Band Uncontrolled Environment Set by FCC $\mu\text{W}/\text{cm}^2$	% of the Standard
Future PCS TDMA and GSM configuration	Base of the tower	55.136	1000	5.5136

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 5.514 % 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

CUDDY & FEDER & WORBY LLP

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

(914) 761-1300
TELECOPIER (914) 761-5372/6405
www.cfww.com

500 FIFTH AVENUE
NEW YORK, NEW YORK 10110
(212) 944-2841
TELECOPIER (212) 944-2843

WESTAGE BUSINESS CENTER
300 SOUTH LAKE DRIVE
FISHKILL, NEW YORK 12524
(845) 896-2229
TELECOPIER (845) 896-3672

STAMFORD, CONNECTICUT
NORWALK, CONNECTICUT

WILLIAM S. NULL
DAWN M. PORTNEY
ELISABETH N. RADOW
NEIL T. RIMSKY
RUTH E. ROTH
JENNIFER L. VAN TUYL
CHAUNCEY L. WALKER (also CA)
ROBERT L. WOLFE
DAVID E. WORBY

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

February 11, 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 - Petition No. 446
Will Russ Court,
Norwalk, Connecticut
Notice of Exempt Modification

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

On April 12, 2000 the Council determined that AT&T's proposed installation on an existing CL&P electric transmission facility would not require a Certificate of Environmental Compatibility and Public Need (Petition No. 446) pursuant to Section 16-50g. et seq. of the General Statutes of Connecticut. AT&T's existing facility consists of three panel antennas on an 8.6" diameter pipe extension on existing CL&P transmission line structure number 1102 with associated equipment cabinets on a steel frame located underneath the existing lattice tower located off Will Russ Court in Norwalk, Connecticut.

At this time, AT&T is notifying the Connecticut Siting Council of its intent to modify the existing facility pursuant to Section 16-50j-72 of the Regulations of Connecticut State Agencies. AT&T will be installing an additional equipment cabinet (approximately 76"H x 76"W x 30"D) on AT&T's existing steel frame at the facility. There will be no other infrastructure changes to AT&T's facility.



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

February 5, 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-046 (Norwalk Center-NU tower)

Dear Mr. Gelston:

On behalf of AT&T Wireless, Wireless Facilities Inc. has performed 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-046
Site Name	Norwalk Center-NU Tower
Latitude	41.12666
Longitude	-73.43277
Address of structure	28 Will Russ Court Norwalk, 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	0,120,240
Elevation (ft)	105
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/m²
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 μW/cm² is given by

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

Where: S = Power density in μW/cm²
ERP = Effective radiated power (W)
D = Distance in meters

The calculations for the power density measurement make the following assumptions:

- ◆ WFI's analysis considered all the antennas for the current existing and the future GSM deployment AT&T is proposing.
- ◆ The formula utilized for the calculation is taken from the FCC recommended OET bulletin 65 (shown above).
- ◆ The worst case scenario was assumed with all the antennas for both the current and the future installation pointing to the base of the tower.
- ◆ A 100 % duty cycle with maximum power and the maximum number of channels (8 channels and 110.8 Watts maximum ERP per channel for the TDMA system and 2 channels and 275 Watts maximum ERP per channel for the GSM system) was assumed.

The maximum worst-case values of the power density for this analysis are outlined below:

Configuration	Point of Worst Case Predicted Level	Predicted Value $\mu\text{W}/\text{cm}^2$	Maximum Limit for PCS Band Uncontrolled Environment Set by FCC $\mu\text{W}/\text{cm}^2$	% of the Standard
Future PCS TDMA and GSM configuration	Base of the tower	52.7	1000	5.27

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 5.27 % 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

CUDDY & FEDER & WORBY LLP

90 MAPLE AVENUE
WHITE PLAINS, NEW YORK 10601-5196

(914) 761-1300

TELECOPIER (914) 761-5372/6405

www.cfwlaw.com

500 FIFTH AVENUE
NEW YORK, NEW YORK 10110
(212) 944-2841
TELECOPIER (212) 944-2843

WESTAGE BUSINESS CENTER
300 SOUTH LAKE DRIVE
FISHKILL, NEW YORK 12524
(845) 896-2229
TELECOPIER (845) 896-3672

STAMFORD, CONNECTICUT
NORWALK, CONNECTICUT

CUDDY & FEDER
1971-1995

WILLIAM S. NULL
DAWN M. PORTNEY
ELISABETH N. RADOW
NEIL T. RIMSKY
RUTH E. ROTH
JENNIFER L. VAN TUYL
CHAUNCEY L. WALKER (also CA)
ROBERT L. WOLFE
DAVID E. WORBY

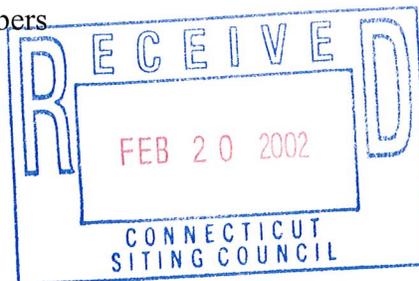
Of Counsel
MICHAEL R. EDELMAN
ANDREW A. GLICKSON (also CT)
ROBERT L. OSAR (also TX)
MARYANN M. PALERMO
ROBERT C. SCHNEIDER
LOUIS R. TAFFERA

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

February 11, 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 - Petition No. 470
Cooper Hill Road,
Ridgefield, Connecticut
Notice of Exempt Modification

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

On July 11, 2000 the Council determined that AT&T's proposed installation on an existing CL&P electric transmission facility would not require a Certificate of Environmental Compatibility and Public Need (Petition No. 470) pursuant to Section 16-50g. et seq. of the General Statutes of Connecticut. AT&T's existing facility consists of three panel antennas on a 5.6" diameter mounting pipe on existing CL&P transmission line structure number 3294 with associated equipment cabinets on a 15' x 19'-6" concrete pad at the base of the structure located off Cooper Hill Road in Ridgefield, Connecticut.

At this time, AT&T is notifying the Connecticut Siting Council of its intent to modify the existing facility pursuant to Section 16-50j-72 of the Regulations of Connecticut State Agencies. 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.

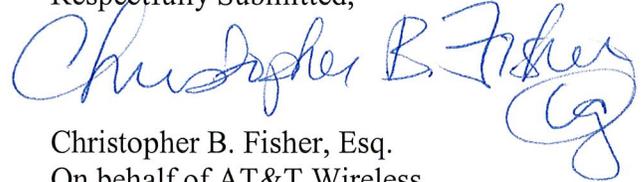
The proposed addition of an equipment cabinet to AT&T Wireless' facility does not constitute a "modification" of an existing facility as defined in Connecticut General

CUDDY & FEDER & WORBY LLP

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. Moreover, the additional channels being deployed by AT&T at the facility together with existing channels at the site will not result in power densities exceed the "worst case" for AT&T as originally set forth in Petition No. 470. 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.

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

Respectfully Submitted,

A handwritten signature in blue ink that reads "Christopher B. Fisher". To the right of the signature is a circular stamp containing the number "69".

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

cc: First Selectman, Town of Ridgefield
Darryl Hendrickson, Bechtel Telecommunications



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

February 1, 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-066 (Ridgefield East)

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-066
Site Name	Ridgefield East
Latitude	41.27444
Longitude	-73.46611
Owner of the structure	Connecticut Light and Power Co.
Address of structure	Cooper Hill Rd Ridgefield, CT 06877
Type of structure	Power pole
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) and PCS GSM
Operating frequency	D, E bands (PCS)
Azimuths	0,120,240
Elevation (ft)	85
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/m²
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 μW/cm² is given by

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

Where: S = Power density in μW/cm²
ERP = Effective radiated power (W)
D = Distance in meters

The calculations for the power density measurement make the following assumptions:

- ◆ WFI's analysis considered all the antennas for the current existing and the future GSM deployment AT&T is proposing.
- ◆ The formula utilized for the calculation is taken from the FCC recommended OET bulletin 65 (shown above).
- ◆ The worst case scenario was assumed with all the antennas for both the current and the future installation pointing to the base of the tower.
- ◆ A 100 % duty cycle with maximum power and the maximum number of channels (8 channels and 124.4 Watts maximum ERP per channel for the TDMA system and 2 channels and 275 Watts maximum ERP per channel for the GSM system) was assumed.

The maximum worst-case values of the power density for this analysis are outlined below:

Configuration	Point of Worst Case Predicted Level	Predicted Value $\mu\text{W}/\text{cm}^2$	Maximum Limit for PCS Band Uncontrolled Environment Set by FCC $\mu\text{W}/\text{cm}^2$	% of the Standard
Future PCS TDMA and GSM configuration	Base of the tower	89.01	1000	8.901

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 8.901 % 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