



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

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

March 28, 2002

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

RE: **EM-AT&T-009-051-020227** - AT&T Wireless notice of intent to modify existing telecommunications facilities located in Bethel and Fairfield, Connecticut.

Dear Attorney Fisher:

At a public meeting held on March 21, 2002, the Connecticut Siting Council (Council) acknowledged your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies. Although no conditions have been placed on this acknowledgement, I am attaching a letter from the Town of Bethel, dated March 15, 2002, for your review and consideration.

The proposed modifications are to be implemented as specified here and in your notices dated February 25, 2002. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary by six decibels, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on this tower.

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

Thank you for your attention and cooperation.

Very truly yours,


Mortimer A. Gelston

Chairman

MAG/RM/laf

c: Honorable Kenneth A. Flatto, First Selectman, Town of Fairfield
Joseph E. Devonshuk, Town Planner, Town of Fairfield
Honorable Judy Novachek, First Selectman, Town of Bethel
Betty Brosius, Planning & Zoning Official, Town of Bethel
Kenneth C. Baldwin, Esq., Robinson & Cole
Ronald C. Clark, Nextel Communications
Michele Briggs, SNET Mobility LLC
Christine Belvin, LLC Inc.
Sandy M. Carter, Verizon Wireless
Stephen J. Humes, Esq., LeBoeuf, Lamb, Greene & MacRae
Sam D'Agostino, PageNet Inc.



PLANNING & ZONING DEPARTMENT

Bethel Municipal Center, 1 School Street
Bethel, Connecticut 06801 (203) 794-8519

March 15, 2002



Mr. S. Derek Phelps, Executive Director
State of Connecticut Siting Council
Ten Franklin Square
New Britain, CT 06051

Re: EM-AT&T-009-051-020227
AT&T Notice of Intent to Modify Existing Facilities
7 Stony Hill Road

Dear Mr. Phelps:

At their meeting of March 12, 2002, the Planning and Zoning Commission discussed the AT&T proposal for installation of a new equipment cabinet at the above-named site. It is understood that this equipment will be contained within the existing fenced area on the concrete pad at the base of the tower.

The Commission acknowledges that the installation of this equipment should have no visual or physical impact to the site, and they have no objection to the proposal.

The Commission requests that the applicant inspect the landscaping outside of the fenced area; dead trees were replaced at our request last fall, but with the recent dry weather it appears that some materials may not have survived the winter.

Thank you for the opportunity to comment on AT&T's application.

Very truly yours,

Betty Brosius
Planning & Zoning Official

cc: Judith Novachek, First Selectwoman

CUDDY & FEDER & WORBY LLP

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February 26, 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
7 Stony Hill Road, Bethel, Connecticut
281 Woodhouse Road, Fairfield, 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
Linda Grant

cc: Christopher B. Fisher, Esq.

CUDDY & FEDER & WORBY LLP

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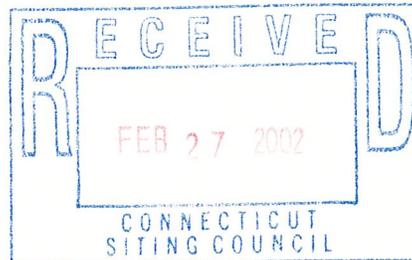
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February 25, 2002

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. 479
7 Stony Hill Road, Bethel, Connecticut
Notice of Exempt Modification



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

On September 19, 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. 479) 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 extension mast on an existing CL&P transmission line structure with associated equipment cabinets in a fenced compound at the base of the structure located at 7 Stony Hill Road in Bethel, 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.

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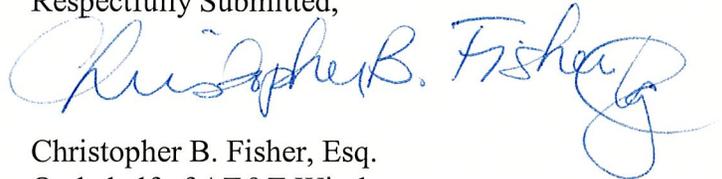
February 26, 2002

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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 exceed the total radio frequency electromagnetic radiation power density at the Tower's site boundary and 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.

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

Respectfully Submitted,

A handwritten signature in blue ink that reads "Christopher B. Fisher". The signature is written in a cursive style with a large, stylized initial "C".

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

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



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

February 21, 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-176 (Bethel North-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 AT&T site configuration and technical parameters:

Site ID	CT-176
Site Name	Bethel North-NU Pole
Latitude	41.41583
Longitude	-73.40166
Address of structure	7 Stony Hill Road, Bethel, CT
Type of structure	Power Pole
Antenna structure owner	Northeast Utilities
FCC class and Type of service	PCS TDMA (IS-136) PCS GSM
Operating frequency	D, E bands (PCS)
Azimuths	30, 150, 270
Elevation (ft)	145
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/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 existing antennas of all carriers 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 per sector for each system was assumed. (see following table)

Description	AT&T PCS		Nextel ESMR
	Current	Future	
Max. ERP/Ch, Watts	86.4	275	Not available
Max. No. of Ch/Sector	16	4	Not available
Max. ERP/Sector, Watts	1382.4	1100	900
Antenna Centerline, ft.	145	145	152

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

Provider/Carrier		Point of Worst Case Level	Predicted Value $\mu\text{W}/\text{cm}^2$	Maximum Limit for PCS or Cellular Band Uncontrolled Environment Set by FCC $\mu\text{W}/\text{cm}^2$	% of the Standard
AT&T	PCS TDMA	Base of the tower	25.71	1000	2.571
	PCS GSM	Base of the tower	20.46	1000	2.046
Nextel, ESMR		Base of the tower	15.17	550	2.76
Total % of Standard					7.292

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 contributed by AT&T in all uncontrolled areas (Assuming a worst case scenario and a 100 % duty cycle for all the transmitters.) is equal or less than 4.617% (2.571 + 2.046) of the maximum permissible exposure limit mandated by the FCC and endorsed by the NCRP and ANSI/IEEE.

The worst-case composite level of RF radiation in all uncontrolled areas for all identified systems operating at this facility is equal or less than 7.292 % of the FCC maximum permissible exposure limit.

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

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February 25, 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 - EM-CROWN -051-990706
281 Woodhouse Road, Fairfield, 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 281 Woodhouse Road, Fairfield, Connecticut (Docket No. 86). On August 31, 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-051-990706) 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 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-

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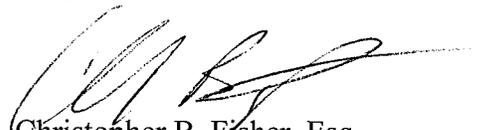
February 25, 2002

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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 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 Woodhouse 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 Fairfield
Darryl Hendrickson, Bechtel Telecommunications



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-084 (Fairfield Murray)

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-084
Site Name	Fairfield Murray
Latitude	41.19583
Longitude	-73.28194
Address of structure	281 Wood house Lane Fairfield, CT
Type of structure	Monopole
Antenna structure owner	AT&T
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	0,90,240
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/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

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/cm ²	Maximum Limit for PCS Band Uncontrolled Environment Set by FCC μW/cm ²	% of the Standard
Current PCS TDMA configuration	1500 feet away in front of the antenna	0.4	1000	0.04
Future PCS TDMA and GSM configuration	1500 feet away in front of the antenna	0.54	1000	0.054

In addition to predictive analysis, on-site data was recorded at different locations around the monopole. In all areas, less than or equal to 3.55 % 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 $\mu\text{W}/\text{cm}^2$	Maximum Limit for PCS Band Uncontrolled Environment Set by FCC $\mu\text{W}/\text{cm}^2$	% of the Standard
5 meters in front of sector 1	20.5	1000	2.05
5 meters in front of sector 2	35.5	1000	3.55
25 meters in front of sector 3	2.8	1000	0.28

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 3.55 % 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