

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

September 6, 2002

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

RE: **EM-AT&T-012-020826** - AT&T Wireless PCS, LLC d/b/a AT&T Wireless notice of intent to modify an existing telecommunications facility located at 130 Vernon Road, Bolton, Connecticut.

Dear Attorney Fisher:

At a public meeting held on September 5, 2002, the Connecticut Siting Council (Council) acknowledged your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies.

The proposed modifications are to be implemented as specified here and in your notice received in our office on August 26, 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.

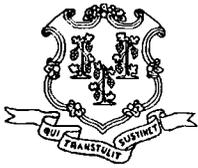
Very truly yours,



Mortimer A. Gelston
Chairman

MAG/laf

c: Honorable Carl A. Preuss, First Selectman, Town of Bolton
Lincoln B. White, Zoning Enforcement Officer, Town of Bolton
Mountaintop Services, Inc.
Julie M. Donaldson, Esq., Hurwitz & Sagarin LLC
Thomas F. Flynn III, Nextel Communications
Sandy M. Carter, Verizon Wireless
Stephen J. Humes, Esq., LeBoeuf, Lamb, Greene & MacRae
Michele G. Briggs, Southwestern Bell Mobile Systems



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August 26, 2002

Honorable Carl A. Preuss
First Selectman
Town of Bolton
222 Bolton Center Road
Bolton, CT 06043

RE: **EM-AT&T-012-020826** – AT&T Wireless PCs, LLC d/b/a AT&T Wireless notice of intent to modify an existing telecommunications facility located at 130 Vernon Road, Bolton, Connecticut.

Dear Mr. Preuss:

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 tentatively scheduled for September 5, 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/slm

Enclosure: Notice of Intent

c: Lincoln B. White, Zoning Enforcement Officer, Town of Bolton

RECEIVED

NOTICE OF INTENT TO MODIFY AN AUG 26 2002
EXISTING TELECOMMUNICATIONS FACILITY AT
130 VERNON ROAD, BOLTON, CONNECTICUT
CONNECTICUT
SITING COUNCIL

Pursuant to the Public Utility Environmental Standards Act, Connecticut General Statutes § 16-50g et. seq. ("PUESA"), and Sections 16-50j-72(b) of the Regulations of Connecticut State Agencies adopted pursuant to the PUESA, AT&T Wireless PCS, LLC d/b/a AT&T Wireless ("AT&T Wireless") hereby notifies the Connecticut Siting Council of its intent to modify an existing facility located 130 Vernon Road, Bolton, Connecticut (the "Vernon Road Facility"), owned by Mountaintop Services, Inc., ("Tower Owner"). AT&T Wireless and the Tower Owner have agreed to share the use of the Vernon Road Facility, as detailed below.

The Vernon Road Facility

The Vernon Road Facility consists of an approximately one hundred fifty foot (150) guyed tower (the "Tower") and associated equipment currently being used for wireless communications by Sprint and others (Latitude N 41.8020, Longitude W 72.4412). It should also be noted other guyed towers are located adjacent to and in close proximity to the Tower and constitute the Facility.

AT&T Wireless' Facility

As shown on the enclosed plans prepared by Dewberry-Goodkind, Inc., including a site plan and tower elevation of the Vernon Road Facility¹, AT&T Wireless proposes shared use of the Facility by placing antennas on the Tower and equipment cabinets at grade needed to provide personal communications services ("PCS"). AT&T Wireless will install 6 panel antennas at approximately the 115 foot level of the Tower and associated equipment cabinets (2 proposed, 2 future, each 76"H x 30" W x 30" D) located on a concrete pad within the existing compound for the Facility. As evidenced in the structural evaluation prepared by Dewberry-Goodkind, Inc., annexed hereto as Exhibit A, AT&T has confirmed that the Tower is structurally capable of supporting the addition of AT&T Wireless' antennas.

AT&T Wireless' Facility Constitutes An Exempt Modification

The proposed addition of AT&T Wireless' antennas and equipment to the Vernon Road Facility constitutes an exempt "modification" of an existing facility as defined in Connecticut General Statutes Section 16-50i(d) and Council regulations promulgated pursuant thereto. Addition of AT&T Wireless' antennas and equipment to the Tower will not result in an increase of the Tower's height nor extend the site boundaries. Further, there will be no increase in noise levels by six (6) decibels or more at the Tower site's boundary. As set forth in an Emissions Report prepared by

¹ For clarity, the drawings include existing conditions for the compound and Tower elevation in a shade lighter than the AT&T improvements.

Louis G. Cornacchia, P.E., portions of which are annexed hereto as Exhibit B, the total radio frequency electromagnetic radiation power density at the Tower site's boundary will not be increased to or above the standard adopted by the Connecticut Department of Environmental Protection as set forth in Section 22a-162 of the Connecticut General Statutes and MPE limits established by the Federal Communications Commission. Note, that the MPE report includes a cumulative calculation of compliance for both the Tower itself and transmitters on adjacent towers at the Facility. For all the foregoing reasons, addition of AT&T Wireless' facility to the Tower constitutes an exempt modification which will not have a substantially adverse environmental effect.

Conclusion

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

Respectfully Submitted,



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

cc: First Selectman, Town of Bolton
RJ Wetzel, Bechtel

59 Elm Street, Suite 101 • New Haven, Connecticut 06510-2047

Voice 203-776-2277 Fax 203-776-2288

www.dewberry-goodkind.com

June 5, 2002



Mr. Romeo Ballesteros
Bechtel Telecommunications
210 Pomeroy Avenue, Suite 201
Meriden, CT 06450

Bechtel ID# 907-007-333

AWS ID# _____

Re: *Site No. CT-333.1*
150-Foot Guyed Tower
Bolton – Mountaintop Services, Inc.
130 Vernon Road, Bolton, CT 06043
Independent Structural Review

SCANNED

Dear Sirs:

We have completed our structural review of the existing guyed tower's capacity to support an array of panel antennas on standoff T-arm pipe frames at the above referenced site, pursuant to Section 108.1.1 of the Connecticut State Building Code (CSBC). We reviewed the tower construction fabrication details dated October 17, 2001 prepared by PiROD INC.

Section 1609.1 of the Connecticut State Building Code addresses radio and television towers and references Section 3108.4 of the 1996 BOCA Code. The Boca Code references EIA/TIA 222-E for antenna supporting structures. The construction drawings state that the design conforms to the later EIA/TIA 222-F code and is therefore in compliance with EIA/TIA 222-E.

The guyed tower is 150ft high and the drawings state that it is designed to be extendable to 300ft. In it's initial (current) configuration the tower is designed to support 2 arrays of panel antennas on standoff T-Frames between 115 and 150 ft above ground level (AGL). The tower is also designed to support VHF and UHF omni antennas and parabolic antennas with radomes. In the extended condition the tower will support omni antennas and directional panel antennas with coax feed lines and parabolic antennas with radomes and solid waveguide located from 165ft AGL to 300ft AGL. The 6 AT&T Wireless PCS, LLC panel antennas, proposed to be located 115ft above the foundation, will be at an elevation specified for 9 similar panel antennas in the design notes on the drawings. Based upon design inventory there is ample capacity to support the proposed AT&T installation. No calculations for the foundation design were presented but the documents refer to a soils report by Dr. Clarence Welti, PE, PC, Inc. and a spread footing sized to bear on clean bedrock has been specified for the tower with reinforced concrete anchor blocks for the guys. Visual inspection indicates these conditions have been achieved.

Upon review of the signed and sealed drawings prepared by William B. Rettig P.E. for PiROD INC. it is our conclusion that the tower is adequate to support the proposed AT&T Wireless PCS, LLC antennas, coaxial cables and T-arm pipe frames. The design is in compliance with the Connecticut State Building Code.

Should you have any questions, please contact us.

Very truly yours,

Goodkind & O'Dea, Inc.

A Dewberry Company

Francis D. Kobylenski, P.E.

Project Manager



The Principal Features Of The Proposed Installation And The Assumptions Considered In The Analysis Are As Follows:

- a) The elevation from the centerline of the proposed AT&T antennas to the base of the existing guyed tower will be approximately 115 feet. The closest a person can approach the transmitting antenna centerline is 109 feet. This assumes a 6 foot tall person, with the distances being measured from the top of that person's head to the of the transmitting antenna panel in question.
- b) The antennas will be mounted in three sectors, two (2) directional antennas [Allgon 7250.03 or equivalent] in each sector for GSM transmission and receive. The physical arrangement of these antennas is illustrated in drawings given by AT&T Wireless. (Assumed 2 degree downtilt for all antennas in this analysis.)
- c) The power output from the transmitting antennas for all GSM channels will not exceed a total of 1000 watts ERP (250 WERP/channel @ Four (4) channels). The power output from these GSM radio transmissions could be at frequencies between 1900-2000 MegaHertz..
- d) The coverage pattern of the transmitting antennas will be in three (3) sectors and will be assumed to transmit circularly, 360 degrees. This will provide a worst case situation, resulting in the maximum possible power density.
- e) It was assumed that the elevation of the Bolton community within a radius of 2000 feet from the Building perimeter is equal to the elevation at the base of the Building.
- f) All field points are at Radial distances indicated from the base of the antenna unless otherwise indicated.

g.) The EXISTING carriers, RF and elevation data including transmitting characteristics sharing the existing **site** guyed tower are as follows:

Monitor Controls Inc. (Existing)

Maximum ERP/Channel	2.0 watts
Number of Channels/sector	1
Antenna centerline height above grade	50 feet
Antenna Model- ASP-7A- OmniDirectional-Gain=	unity
Frequency of transmission-173.2875 MHz	
Maximum continuous residential Exposure-	100 microwatts/cm.sq.

Weblink Wireless (existing)

Maximum ERP/Channel	200 watts
Number of Channels	2
Number of Transmit/Receive Antennas	2
Antenna centerline height above grade	121 feet
Antenna Model-DB809K/AN310 OmniDirectional-Gain=	9.0 dBd
Frequency of transmission- 929-940 MHz	
Maximum continuous residential Exposure-	600 microwatts/cm.sq.

Sprint (existing)

Maximum ERP/Channel	200 watts
Number of Channels/sector	3
Number of Sectors	3
Number of Transmit/Receive Antennas/sector	3
Antenna centerline height above grade	147.5 feet
Antenna Model- DB980H90E-M Directional-Gain=	15 dBd
Frequency of transmission-1900-2000 MHz	
Maximum continuous residential Exposure-	1000 microwatts/cm. sq

h.) The EXISTING carriers, RF and elevation data, including transmitting characteristics located on the existing **adjacent** (R=200 feet) guyed tower are as follows:

Nextel (existing)

Maximum ERP/Channel	100 watts
Number of Channels/sector	8
Number of Transmit/Receive Antennas/sector	3
Antenna centerline height above grade	226 feet
Antenna Model- DB844H90 - Directional-Gain=	11.6 dBd
Frequency of transmission- 806-900 MHz	
Maximum continuous residential Exposure-	550 microwatts/cm.sq.

Verizon Wireless (existing)

Maximum ERP/Channel	100 watts
Number of Channels/sector	19
Number of Transmit/Receive Antennas/sector	3
Antenna centerline height above grade	110 feet
Antenna ALP 9212 - Directional-Gain= 12.0 dBd	
Frequency of transmission- 806-900 MHz	
Maximum continuous residential Exposure-	550 microwatts/cm.sq.

Verizon Wireless (existing)

Maximum ERP/Channel	275 watts
Number of Channels	1
Number of Transmit/Receive Antennas	1
Antenna centerline height above grade	120 feet
Antenna - UHP8-19A 8' DISH-Gain= 31.9 dBi	
Frequency of transmission- 2128 MHz	
Maximum continuous residential Exposure-	1000 microwatts/cm.sq.

Omnipoint (Existing)

Maximum ERP/Channel	223 watts
Number of Channels/sector	2
Number of Sectors	3
Number of Transmit/Receive Antennas/sector	2
Antenna centerline height above grade	130 feet
Antenna Model- DAPA 09010- OmniDirectional-Gain= 12. dBd	
Frequency of transmission- 1900-2000 Mhz	
Maximum continuous residential Exposure-	1000 microwatts/cm. sq

SNET/Cingular Wireless (existing)

Maximum ERP/Channel	40 watts
Number of Channels/sector	24
Number of Transmit/Receive Antennas/sector	3
Antenna centerline height above grade	100 feet
Antenna ALP11011-N - Directional-Gain= 11.0 dBd	
Frequency of transmission- 806-900 MHz	
Maximum continuous residential Exposure-	550 microwatts/cm.sq.

Metrocall (existing)

Maximum ERP/Channel 300 watts
 Number of Channels/sector 1
 Number of Transmit/Receive Antennas/sector 1
 Antenna centerline height above grade 290 feet
 Antenna Celwave PD1109 - Directional-Gain= 7.5 dBd
 Frequency of transmission- 929.3875 MHz
 Maximum continuous residential Exposure- 600 microwatts/cm.sq.

WILI-FM (Existing)

Maximum ERP/Channel 35 watts
 Number of Channels 1
 Antenna centerline height above grade 240 feet
 Antenna Shivley 6812-1 - Directional-Gain= 2.05 dBd
 Frequency of transmission- 97.7 MHz
 Maximum continuous residential Exposure- 100 microwatts/cm.sq.

Mountaintop Services (existing)

Maximum ERP/Channel 75 watts
 Number of Channels 1
 Number of Transmit/Receive Antennas 1
 Antenna centerline height above grade 160 feet
 Antenna Celwave PD455 - OmniDirectional-Gain= 10.0 dBd
 Frequency of transmission- 464.025 MHz
 Maximum continuous residential Exposure- 300 microwatts/cm.sq.

ARCH WIRELESS (Existing)

Maximum ERP/Channel 150 watts ERP
 Number of Channels 1
 Number of Transmit/Receive Antennas 2
 Antenna centerline height above grade 140 feet
 Antenna Model- SCALA OGB9-900 OmniDirectional-Gain= 9.0 dBd
 Frequency of transmission- 931 MHz
 Maximum continuous residential Exposure- 600 microwatts/cm./sq.

AT%T BROADBAND (Existing)

Maximum ERP/Channel 150 watts ERP
 Number of Channels 1
 Number of Transmit/Receive Antennas 1
 Antenna centerline height above grade 150 feet
 Antenna Model- PD455 OmniDirectional-Gain= 10.0 dBd
 Frequency of transmission- 461.85 MHz
 Maximum continuous residential Exposure- 300 microwatts/c.sq.m

TABLE IIA-1
EMF LEVELS IN MICROWATTS/CM.SQ./ PERCENTAGE OF STANDARDS

AT&T WIRELESS INSTALLATION (Site 333.1) ON EXISTING GUYED
TOWER

130 VERNON ROAD, BOLTON, CONNECTICUT

Field Point - Any point in the community-16 feet above ground

<u>Antenna System</u>	<u>Elevation Feet</u>	<u>Power WERP</u>	<u>Standard FCC/NCRP</u>	<u>Calculated EMF Density</u>	<u>Percent of Standard</u>
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Residential

<u>AT&T GSM (3) - 1900-2000 MHz</u>					
(Proposed)	115	250	1000	0.342	0.03
<u>SPRINT PCS (9) - 1950-1965 MHz</u>					
(Existing)	147.5	200	1000	0.079	0.01
<u>WEBLINK WIRELESS (2) - 929-940 MHz</u>					
(Existing)	121	200	600	0.271	0.05
<u>MONITOR CONTROLS, INC.(2) - 173.2875 MHz</u>					
(Existing)	50	2.0	100	0.004	0.01
<u>EXISTING COLOCATED CARRIERS ON ADJACENT 250' TOWER</u>					
<u>NEXTEL (9) - 806-900 MHz</u>					
(Existing)	226	100	550	0.182	0.03
<u>VERIZON CDMA (9) - 806-900 MHz</u>					
(Existing)	110	100	550	1.637	0.30
<u>Omnipoint PCS (6) - 1930-1950 MHz</u>					
(Existing)	130	223	1000	0.599	0.06
<u>SNET/CINGULAR TDMA(9) - 800-900 MHz</u>					
(Existing)	100	40	550	0.833	0.15
<u>METROCALL (1) - 929.3875 MHz</u>					
(Existing)	290	300	600	0.006	0.01
<u>WILI-FM (1) - 97.7 MHz</u>					
(Existing)	240	35	100	0.014	0.01
<u>MOUNTAIN TOP SERVICES (1) - 464.025 MHz</u>					
(Existing)	160	75	300	0.016	0.01
<u>ARCH WIRELESS (2) - 931 MHz</u>					
(Existing)	140	150	600	0.126	0.02
<u>AT&T BROADBAND (1) - 461.85 MHz</u>					
(Existing)	150	150	300	0.066	0.02

**Total Percentage Of All Antenna Sources
located on site tower and adjacent 250 foot tower = 0.71%**

- NOTE:
1. N/A is less than 0.001.
 2. Unless Indicated - Total Percentage of All Antenna Sources = less than 0.01%.
 3. WERP - power output per channel

** EMF emissions contributed by transmitting antennas in differing frequency bands are regulated by MPE Standards for the specific bands in which the emissions are analyzed. When adding the emissions resulting from transmissions in differing frequency bands, the resulting percentages of the emissions compared to the governing MPE standards are added. Per the FCC, percentages of EMF Density levels of applicable Standards, as specified by the FCC OET Bulletin No. 65 Edition 97.01, are addressed as follows:

“Therefore, in mixed or broad band fields, where a number of different frequencies are involved, the contributing of all RF sources must be considered. When different limits are recommended for different frequencies, the fraction of (or percentages) the limit incurred within each frequency interval should be determined, and the sum of all such fractions (or percentages) should not exceed 1.0 (or 100 percent)” See section 4.1 in Appendix A).

ANTENNA MOUNTINGS -IN FAIL MODE POSITION

POWER DENSITY ANALYSIS

**PROPOSED AT&T WIRELESS INSTALLATION: SITE 333.1
150 FOOT GUYED LATTICE TOWER, 130 VERNON ROAD, CT**

Operating Frequency	No. of Trans.	ERP per Trans.	Total Effective Radiated Power	Distance to Target	Calculated Power Density	Maximum Permitted Exposure*	% of MPE	Operator Name
MHz		watts	watts	feet	mW/cm2	mW/cm2	%	
929-941	2	200	400	115	16.94	600	2.82	WEBLINK
1950-1965	3	200	600	141.5	16.78	1000	1.68	SPRINT
173.28	1	2	2	44	0.578	100	0.58	MONITOR CONTROL

Total Percentage of Max. Permissible Exposure before AT&T Wireless: **5.08%**

AT&T Wireless' Contribution:

1965-1970	4	250	1000	109	47.13	1000	4.71	AT&T
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Total percentage of Max. permissible Exposure after AT&T Wireless: **9.76%**

*IEEE C95.1-1991

NOTE: The data contained in this Power Density Analysis, is based on file of the Connecticut Siting Council and from information provided by AT&T WIRELESS SERVICES