



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

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E-Mail: siting.council@po.state.ct.us

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

May 11, 2001

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

RE: **TS-AT&T-077-010430** - AT&T Wireless PCS LLC request for an order to approve tower sharing at an existing telecommunications facility located at 205 Spencer Street, Manchester, Connecticut.

Dear Attorney Fisher:

At a public meeting held May 10, 2001, the Connecticut Siting Council (Council) ruled that the shared use of this existing tower site is technically, legally, environmentally, and economically feasible and meets public safety concerns, and therefore, in compliance with General Statutes § 16-50aa, the Council has ordered the shared use of this facility to avoid the unnecessary proliferation of tower structures, with the condition that the equipment cabinets and ice shield are painted beige and that Building Permits are obtained from the Town of Manchester, Connecticut. 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 may require an explicit request to this agency pursuant to General Statutes § 16-50aa or notice pursuant to Regulations of Connecticut State Agencies Section 16-50j-73, as applicable. Such request or notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point 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.

This decision applies only to this request for tower sharing and is not applicable to any other request or construction.

The proposed shared use is to be implemented as specified in your letter dated April 26, 2001.

Thank you for your attention and cooperation.

Very truly yours,


Mortimer A. Gelston
Chairman



MAG/RKE/laf

c: Honorable Stephen T. Cassano, Mayor, Town of Manchester
Richard J. Sartor, General Manager, Town of Manchester
Thomas R. O'Marra, Zoning Enforcement Officer, Town of Manchester
Stephen J. Humes, Esq., LeBoeuf, Lamb, Greene & MacRae



Town of Manchester

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www.ci.manchester.ct.us

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RICHARD J. SARTOR, GENERAL MANAGER

May 3, 2001

Mr. Joel M. Rinebold, Executive Director
State of Connecticut Siting Council
Ten Franklin Square
New Britain, CT 06051

Re: TS-AT&%-077-010430 - 205 Spencer Street
Manchester, Connecticut



Dear Mr. Rinebold:

On behalf of the Town of Manchester, Connecticut we acknowledge the notice sent with your letter on May 1, 2001. The existing facility at 205 Spencer Street was constructed pursuant to building permit #99-407.

The latest inspection, conducted on February 16, 2001, discloses the equipment cabinets are not the color as described in the permit application and that the transformer has been placed on the opposite side of the enclosure from that which was originally approved. The equipment cabinets and transformers were understood to be required to be beige. Although the location of the transformer is not as approved, a review discloses that it is not in violation of any other applicable regulations and there appears to be no reason to require its relocation.

The subject application indicates that in addition to equipment cabinets AT&T proposes to install an "ice shield cover". The Town of Manchester has no objection to the co-sharing of this facility provided that applicable building permits for the construction of the new pads and covers are submitted to the appropriate code officials and we would respectfully request that existing and proposed cabinets as well as the ice shield cover be required to the color that was originally approved, beige.

Very truly yours,

Thomas R. O'Marra
Zoning Enforcement Officer

TRO'M/s

R:\SHARON09\TOM\LETTERS\205 Spencer.wpd

cc: Mark Pellegrini, Director of Planning
Permit File #99-407

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CUDDY & FEDER & WORBY LLP

90 MAPLE AVENUE
WHITE PLAINS, NEW YORK 10601-5196

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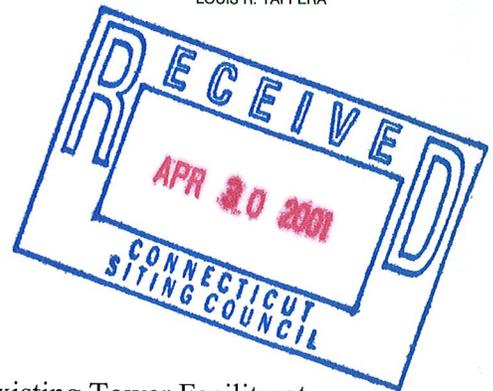
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ROBERT C. SCHNEIDER
LOUIS R. TAFFERA

April 27, 2001



VIA FEDERAL EXPRESS

Mr. Joel Rinebold
Connecticut Siting Council
10 Franklin Square
New Britain, Connecticut 06051

Re: AT&T Wireless Services request for the Shared Use of an Existing Tower Facility at 205 Spencer Street, Manchester, Connecticut and 1605 Durham Road, Wallingford, Connecticut

Dear Mr. Rinebold:

On behalf of AT&T Wireless PCS, LLC d/b/a AT&T Wireless Services, we respectfully enclose an original and twenty copies of its request for the shared use of an existing tower with respect to the above mentioned facilities, together with a check for \$500.00 for each facility, the filing fee. We would appreciate it if these matters were placed on the next available agenda by the Council to approve the application and issue an order for shared use by AT&T. 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

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DANIEL F. LEARY (also CT)
BARRY E. LONG

April 26, 2001

VIA FEDERAL EXPRESS

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

Re: Tower Sharing Request by AT&T Wireless
Existing VoiceStream Tower Facility at
205 Spencer Street, Manchester, Connecticut



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

Pursuant to Connecticut General Statutes (C.G.S.) § 16-50aa, AT&T Wireless PCS LLC, by and through its agent AT&T Wireless Services, Inc., ("AT&T Wireless") hereby requests an order from the Connecticut Siting Council (the "Council") to approve the proposed shared use of an existing communications tower, located at 205 Spencer Street in the Town of Manchester (the "Spencer Street Facility"), owned by VoiceStream Communications ("VoiceStream"). AT&T Wireless and VoiceStream have agreed to the shared use of the Spencer Street Facility, as detailed below.

The Spencer Street Facility

The Spencer Street Facility consists of an approximately one hundred twenty five (125) foot high "stealth" flagpole tower (the "Tower") and equipment currently being used by

April 26, 2001

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VoiceStream. A chain link fence surrounds the Spencer Street Facility. Current adjacent land uses include shopping centers, I-384, and undeveloped property with a CL&P transmission line.

AT&T Wireless' Facility

As shown on the enclosed plans prepared by Natcomm, LLC, including a site plan and tower elevation of the Spencer Street Facility, AT&T Wireless proposes shared use of the Facility by placing antennas within the Tower and equipment cabinets needed to provide personal communications services ("PCS") within the existing fenced compound. AT&T Wireless will conceal three (3) panel antennas within the flagpole at approximately the 99 foot level of the Tower. The associated equipment cabinets will be located on a 10' x 20' concrete pad located within the existing fenced compound.

Connecticut General Statutes § 16-50aa provides that, upon written request for shared use approval, an order approving such use shall be issued, "if the council finds that the proposed shared use of the facility is technically, legally, environmentally and economically feasible and meets public safety concerns." (C.G.S. § 16-50aa(c)(1).) Further, upon approval of such shared use, it is exclusive and no local zoning or land use approvals are required C.G.S. § 16-50x. Shared use of the Spencer Street Facility satisfies the approval criteria set forth in C.G.S. § 16-50aa as follows:

- A. Technical Feasibility The "stealth" flagpole tower was designed and constructed to support the antennas of three carriers concealed within the pole. Therefore, the proposed shared use of this tower is technically feasible.
- B. Legal Feasibility Pursuant to C.G.S. § 16-50aa, the Council has been authorized to issue an order approving shared use of the existing Spencer Street Facility. (C.G.S. § 16-50aa(c)(1)). Under the authority vested in the Council by C.G.S. § 16-50aa, an order by the Council approving the shared use of a tower would permit the Applicant to obtain a building permit for the proposed installation.
- C. Environmental Feasibility The proposed shared use would have a minimal environmental effect, for the following reasons:
 1. The proposed installation would have a de minimis visual impact, and would not cause any significant change or alteration in the physical or environmental characteristics of the existing facility;

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2. The proposed installation by AT&T Wireless would not increase the height of the tower or extend the boundaries of the Spencer Street Facility;
 3. The proposed installation would not increase the noise levels at the existing facility boundaries by six decibels or more;
 4. Operation of AT&T Wireless' antennas at this site would not exceed the total radio frequency electromagnetic radiation power density level adopted by the FCC and Connecticut Department of Health. The "worst case" exposure calculated for the operation of this facility for all carriers, would be approximately 5.26% of the standard. See Cumulative Emissions Compliance Report dated April 6, 2001, prepared by Alex Murillo, AT&T Radio Frequency Engineer, annexed hereto as Exhibit B;
 5. The proposed shared use of the Spencer Street Facility would not require any water or sanitary facilities, or generate air emissions or discharges to water bodies. Further, the installation will not generate any traffic other than for periodic maintenance visits.
- D. Economic Feasibility The Applicant and the tower owner have agreed to share use of the Spencer Street Facility on terms agreeable to both parties. The proposed tower sharing is therefore economically feasible.
- E. Public Safety As stated above and evidenced in the Cumulative Emissions Compliance Report annexed hereto as Exhibit B, the operation of AT&T Wireless' antennas at this site would not exceed the total radio frequency electromagnetic radiation power density level adopted by the FCC and Connecticut Department of Health. Further, the addition of AT&T Wireless' telecommunications service in the Manchester/East Hartford area through shared use of the Spencer Street Facility is expected to enhance the safety and welfare of local residents and travelers through the area resulting in an improvement to public safety in this area.

Conclusion

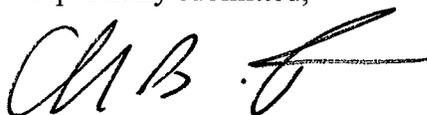
As delineated above, the proposed shared use of the Spencer Street Facility satisfies the criteria set forth in C.G.S. § 16-50aa, and advances the General Assembly's and the Siting Council's goal of preventing the proliferation of towers in the State of Connecticut. AT&T

April 26, 2001

Page 4

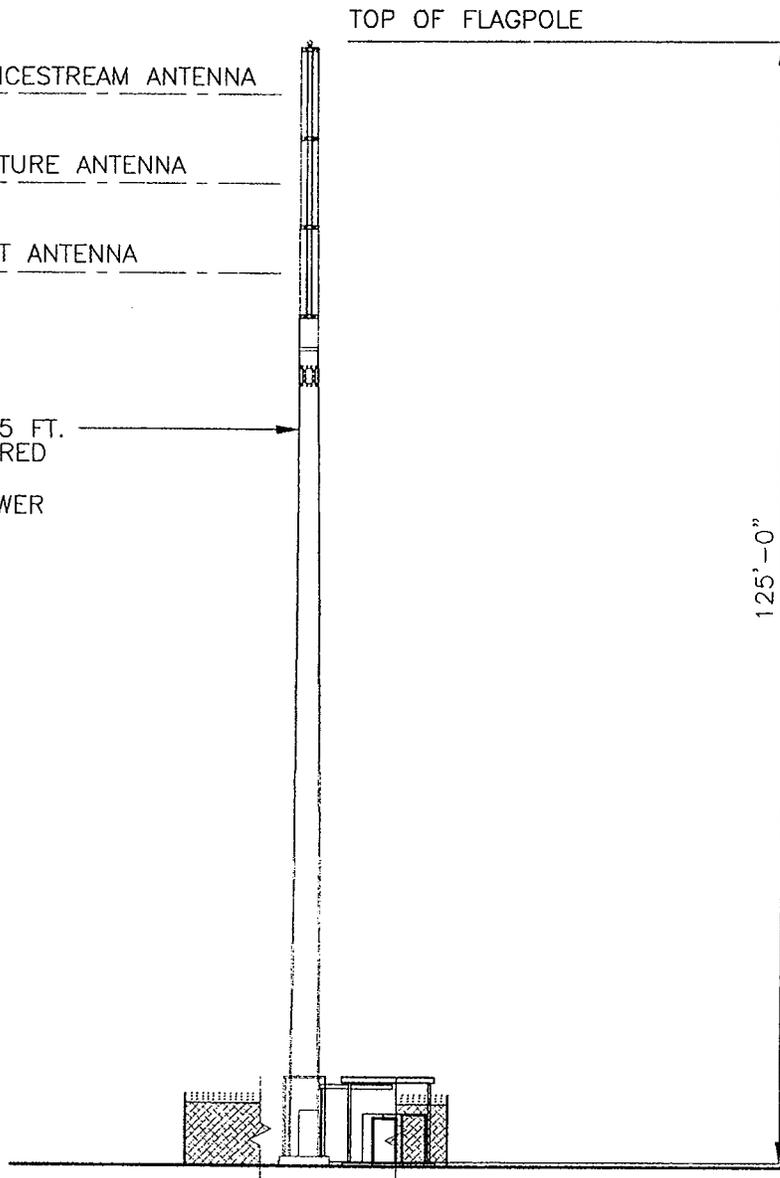
Wireless therefore requests the Siting Council issue an order approving the proposed shared use of the Spencer Street Facility.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "C.B. Fisher", with a long horizontal flourish extending to the right.

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

cc: Mayor, Town of Manchester
Carmen Chapman, AT&T Wireless
Jennifer Gaudet, Pinnacle Site Development
Connie Lamberes, Bechtel Telecommunications



1 **ELEVATION**
NOT TO SCALE



Natcomm, L.L.C.
63-2 North Branford Road
Branford, Connecticut 06408
Tel: (203) 486-0800
Fax: (203) 486-0807

Consulting Engineers - Project Management
Civil - Mechanical - Electrical - Structural



AT&T WIRELESS PCS LLC
12 OMEGA DRIVE
STAMFORD, CONNECTICUT 06907

DRAWING TITLE:

SITING COUNCIL

PROJECT INFORMATION:

MANCHESTER WEST
CT-245
205 SPENCER STREET
MANCHESTER, CT 06040

PROPERTY OWNER:

VOICESTREAM
100 FILLEY STREET
BLOOMFIELD, CT 06002

DRAWING NO.

SC-2

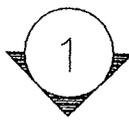
| | |
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| REVISION NO. 0 | DRAWN BY: P.A.M. |
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| DATE ISSUED: 04/05/01 | CHECKED BY: JBA |
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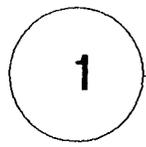
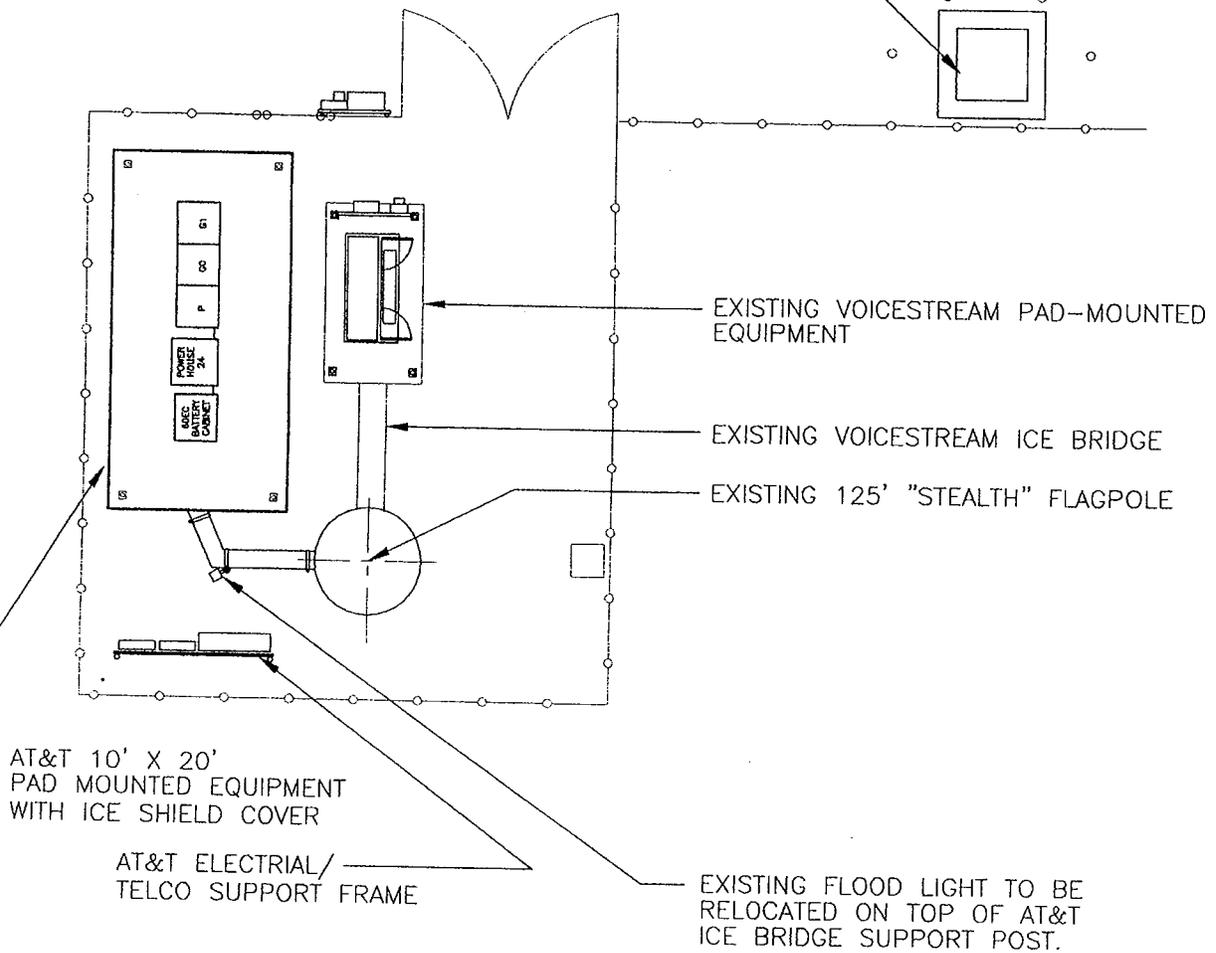
| | |
|-------------|------------------|
| SCALE: NONE | APPROVED BY: OFC |
|-------------|------------------|

| | |
|-------------|------|
| SHEET NO. 2 | OF 2 |
|-------------|------|

A/E PROJECT NO: 291A



EXISTING TRANSFORMER



PARTIAL SITE PLAN

SCALE: 1" = 10'

291ASC1A.dwg 4-5-01 2:31:12 pm EST



Natcomm, L.L.C.
 1200 Main Street, Suite 200
 Stamford, Connecticut, 06907
 Tel: (203) 348-6666
 Fax: (203) 348-6667
 Consulting Engineers - Project Management
 Civil - Structural - Mechanical - Electrical



AT&T

AT&T WIRELESS PCS LLC
 12 OMEGA DRIVE
 STAMFORD, CONNECTICUT 06907

DRAWING TITLE:

SITING COUNCIL

PROJECT INFORMATION:

MANCHESTER WEST
 CT-245
 205 SPENCER STREET
 MANCHESTER, CT 06040

PROPERTY OWNER:

VOICESTREAM
 100 FILLEY STREET
 BLOOMFIELD, CT 06002

DRAWING NO.

SC-1

| | |
|-----------------------|------------------|
| REVISION NO. 0 | DRAWN BY: P.A.M. |
| DATE ISSUED: 04/05/01 | CHECKED BY: JBA |
| SCALE: NONE | APPROVED BY: CFC |
| SHEET NO. 1 OF 2 | |
| A/E PROJECT NO: 291A | |

A. Owner of the structure on which the antenna is located and the location of the antenna:

| | |
|---|----------------------|
| Name of owner of the structure on which the antenna is located: | |
| Owner of Structure: | VoiceStream |
| Address of structure: | 205 Spencer Street |
| | Manchester, CT 06040 |

| | |
|------------|-------------|
| Latitude: | 41° 46' 17" |
| Longitude: | 72° 34' 11" |

B. Owner of the antenna:

| | |
|-----------------------------------|------------------------|
| Name of the owner of the antenna: | AT&T Wireless Services |
| Address of antenna owner: | 12 Omega Drive |
| | Stamford, CT 06907 |
| Telephone number: | (203) 602-7029 |

C. Technical specifications:

| | |
|---|---|
| FCC class (or type) of service: | PCS (IS-136) |
| Operating frequency of transmitter: | 1965-1970MHz |
| Peak power output of transmitter: | 8 Watts/per channel |
| Power into the antenna: | 4 watts |
| Antenna manufacturer: | Hubert Suhner |
| Antenna model: | 1319.41.0079 |
| Antenna type: | Dual Pole |
| Gain of the antenna: | 13.5 dBd |
| Antenna radiating pattern: | H-plane - 85° _{+3°} E-plane -7° _{+1°} |
| Polarization of radiation from antenna: | + - 45 deg Slant |
| Effective radiating power: | 881.35 watts ERP at centerline (maximum) |

D. Power density information:

The power density values presented in the attached studies were achieved according to FCC OET-65 using the following formula:

$$S = \frac{33.4 \times P}{R^2} \quad (\text{Equation 9, FCC OET-65})$$

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

Two measurements were taken for this structure. Besides the AT&T carrier information, the measurements for Voice Stream were also included for the purposes of this study. Given the above equation, the worse case ground scenario is located at the base of the tower.

The results of this analysis indicate that the maximum level of RF energy in areas normally accessible to the public is below all applicable health and safety limits. Specifically, the maximum level of RF energy associated with simultaneous and continuous operation of all proposed transmitters will be less than 5.26% of the safety criteria adopted by the Federal Communication Commission as mandated by the Telecommunications Act of 1996. The Telecommunications Act of 1996 is the applicable Federal law with respect to consideration of the environmental effects of RF emissions in the siting of personal wireless facilities. The maximum level of RF energy will also be less than 5.26% of the exposure limits of ANSI, IEEE, NCRP, and the limits used by all states that regulate RF exposure.

| Carrier | Power Density ($\mu\text{W}/\text{cm}^2$) | Maximum Allowable ($\mu\text{W}/\text{cm}^2$) | Percentage of Maximum |
|-------------|---|---|-----------------------|
| AT&T | 32.32 | 1000 | 3.23% |
| VoiceStream | 20.31 | 1000 | 2.03% |
| Total | 52.63 | 1000 | 5.26% |

The calculations of these values are shown on the attached spreadsheets.

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

4-6-01 _____
 Date Alex Murillo, RF Engineer



CT-245.2.1
Base of tower

Date: April 9, 2001

| ERP Calculator AT&T | | ERP Calculator (Start here) Carrier 2 | |
|------------------------------------|-----------|---------------------------------------|-----------|
| Max. Power to Ant. port (dBm) | 45.051500 | ERP (dbm) | 59.451500 |
| (watts per channel) | 4.000000 | (watts) | 0.000000 |
| Ant. Gain on determined lobe (dBd) | 14.4 | Ant. Gain on determined lobe (dBd) | 0 |
| Maximum Number of Channels | 8 | Maximum Number of Channels | 0 |
| | | (watts per channel) | 0.000000 |
| | | (watts) | 0.000000 |
| | | ERP (dbm) | 0.000000 |
| | | (watts) | 0.000000 |

| ERP Calculator -VoiceStream | | ERP Calculator (Start here) Carrier 1 | |
|------------------------------------|-----------|---------------------------------------|------------|
| Max. Power to Ant. port (dBm) | 49.030900 | ERP (dbm) | 59.030900 |
| (watts per channel) | 10.000000 | (watts) | 800.000000 |
| Ant. Gain on determined lobe (dBd) | 10 | Ant. Gain on determined lobe (dBd) | 0 |
| Maximum Number of Channels | 8 | Maximum Number of Channels | 0 |
| | | (watts per channel) | 0.000000 |
| | | (watts) | 0.000000 |
| | | ERP (dbm) | 0.000000 |
| | | (watts) | 0.000000 |

| Field density | AT&T | VoiceStream |
|--------------------------------|------------|-------------|
| Signal Level (E.R.P. dbm) | 59.451500 | 59.030900 |
| Antenna Centerline Height (ft) | 99 | 119 |
| Antenna Centerline Height (m) | 30.175200 | 36.271200 |
| Signal Level (E.R.P. Watts) | 881.353185 | 800.000000 |
| Field Density (μW/cm2) | 32.329287 | 20.310125 |
| Cumulative Density (μW/cm2) | 32.329287 | 52.639413 |

| Percentage of Maximum |
|------------------------------------|
| 52.64 μW/cm2 Cumulative Density |
| 5.26 % of maximum allowable level. |

FCC OET-65 Standard
Max allowable: 1000 μW/cm2