

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.ct.gov/csc

February 4, 2004

Kenneth C. Baldwin
Robinson & Cole
280 Trumbull Street
Hartford, CT 06103-3597

RE: **EM-VER-014-015-043-064-085-097-040116** - Cellco Partnership d/b/a Verizon Wireless notice of intent to modify existing telecommunications facilities located at 850 West Main Street, Branford; 338 Kaechele Place, Bridgeport; 1455 Forbes Street, East Hartford; 305 West Service Road, Hartford; 439 Homestead Avenue, Hartford; Fairfield Drive, Newtown; and 88 Main Street, Monroe, Connecticut.

Dear Attorney Baldwin:

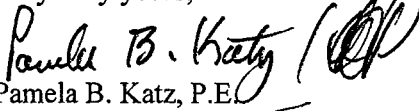
At a public meeting held on October 7, 2002, the Connecticut Siting Council (Council) acknowledged your notice to modify these existing telecommunications facilities, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies.

The proposed modifications are to be implemented as specified here and in your notice dated January 16, 2004. 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 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,


Pamela B. Katz, P.E.
Chairman

PBK/laf

c: See attached list.

Recipient List:

Honorable John Fabrizi, Mayor, City of Bridgeport
Michael P. Nidoh, City Planner, City of Bridgeport
Honorable John E. Opie, First Selectman, Town of Branford
Justine K. Gillen, Zoning Enforcement Officer, Town of Branford
Honorable Timothy D. Larson, Mayor, Town of East Hartford
Michael J. Dayton, Town Planner, Town of East Hartford
Honorable Eddie A. Perez, Mayor, City of Hartford
Robert A. LaPorte, Chairman of City Planning Commission, City of Hartford
Honorable Andrew J. Nunn, First Selectman, Town of Monroe
Daniel A. Tuba, Planning Administrator, Town of Monroe
Honorable Herbert C. Rosenthal, First Selectman, Town of Newtown

280 Trumbull Street
Hartford, CT 06103-3597
Main (860) 275-8200
Fax (860) 275-8299
kbaldwin@rc.com
Direct (860) 275-8345

January 23, 2004

Via Hand Delivery

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

RECEIVED
JAN 23 2004
CONNECTICUT
SITING COUNCIL

Re: **EM-VER-014-015-043-064-085-097-040116**

Dear Mr. Phelps:

Enclosed you will find the Radio Frequency power density information and the antenna specifications requested for the above referenced exempt modification. This information verifies that there is a minor change in radio frequency power density emissions at each of the sites. As indicated on the attached antenna specifications, the existing cellular antennas are in fact heavier and have a larger wind area than the proposed PCS antennas to be installed at each location. Therefore, a structural analysis is not required for the proposed modifications.

Please contact me if you have any additional questions.

Sincerely,


Kenneth C. Baldwin



Law Offices

BOSTON

HARTFORD

NEW LONDON

STAMFORD

GREENWICH

NEW YORK

www.rc.com

KCB:jmh
Enclosures

cc: Sandy M. Carter

HART1-1155221-1



DB948F85E-M

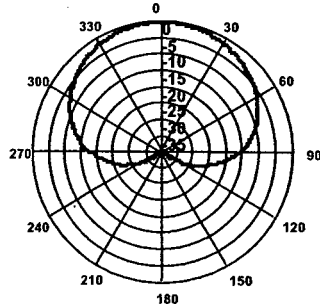
16.2 dBi, Log Periodic Antenna
1850-1990 MHz

1850-1990 MHz

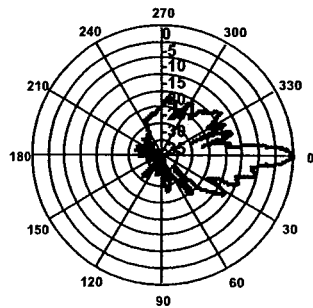
MaxFill™
dB Director®

- Exceptional azimuth roll-off reducing soft hand-offs and improving capacity
- Excellent upper side lobe suppression
- Deep null filling below the horizon assures improved signal intensity
- Low profile appearance and low wind loading profile for easier zoning approvals

85°



Horizontal 1920 MHz



Elevation (Vertical) 1920 MHz



Electrical		Mechanical	
Frequency (MHz):	1850-1990	Weight:	8.5 lbs (3.9 kg)
Polarization:	Vertical	Dimensions (LxWxD):	48 X 3.3 X 7 in (1219 X 84 X 178 mm)
Gain (dBd/dBi):	14.1/16.2	Max. Wind Area:	1.7 ft ² (0.16 m ²)
Azimuth BW:	85°	Max. Wind Load (@ 100mph):	68 lbf (302 N)
Elevation BW:	8°	Max. Wind Speed:	125 mph (201 km/h)
Beam Tilt:	0°	Radiator Material:	Low Loss Circuit Board
USLS* (dB):	>18	Reflector Material:	Pass. Aluminum
Null Fill* (dB):	15	Radome Material:	ABS, UV Resistant
Front-to-Back Ratio* (dB):	40	Mounting Hardware Material:	Galvanized Steel
VSWR:	1.33:1	Connector Type:	7/16 DIN - Female (Bottom)
IM Suppression - Two 20 Watt Carriers:	-150	Color:	Light Gray
Impedance:	50 Ohms	Standard Mounting Hardware:	DB390 Pipe Mount Kit
Max Input Power:	250 Watts	Downtilt Mounting Hardware:	DB5098
Lightning Protection:	DC Ground	Opt. Mounting Hardware:	DB5094-AZ Azimuth Wall Mount
Opt Electrical Tilt:	0°, 2°, 4°, 6°		

* Typical Values

8635 Stemmons Freeway Dallas, Texas U.S.A 75247-3701
Dallas/Ft.Worth Area Tel: 214.631.0310 Fax: 214.631.4706
Toll Free Tel: 1.800.676.5342 Fax: 1.800.229.4706
www.decibelproducts.com
dbtech@decibelproducts.com

Date: 1/24/2003



DB844H90E-XY

12.4 dBd
Wide Band Log Periodic Antenna

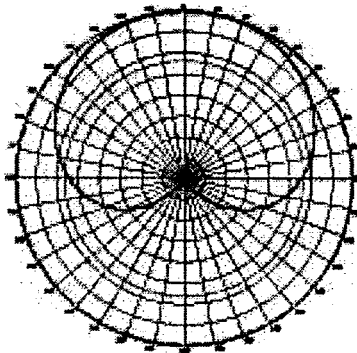
806-896 MHz
880-960 MHz

dB Director®

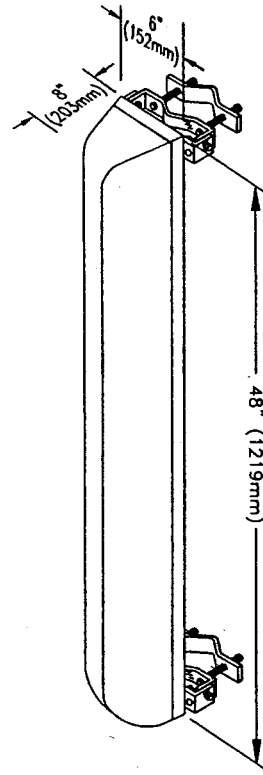
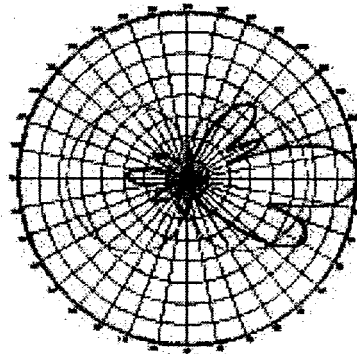
- Wide Band 806-960 MHz, ideal for multiple system requirements.
- Superior Azimuth pattern roll off, reducing sector to sector interference, improving call capacity.
- Extremely rugged, reliable design yet lightweight with low wind load.

90°

Azimuth
(Horizontal)



Elevation
(Vertical)



Electrical

	806-896 MHz	880-960 MHz
Gain:	12 dBd (14.1 dBi)	12.4 dBd (14.5 dBi)
VSWR:	1.35:1	1.4:1
USLS:	> 15 dB	
Horizontal Beamwidth:	90°	
Vertical Beamwidth:	15°	
Front-to-Back Ratio:	40 dB	
Impedance:	50 Ohms	
Max. Input Power:	500 Watts	
Connector:	7/16 DIN (Back) (N-Female, optional)	
Lightning Protection:	DC Ground	

Mechanical

Weight:	10 lbs (4.5 kg)
Wind Area:	2.8 ft ² (0.26 m ²)
Frontal Thrust:	80 lbf (356N) 35.9 kp (at 100 mph)
Lateral Thrust:	112 lbf (498N) 50.3 kp (at 100 mph)
Max. Wind Speed:	125 mph
Radiators:	Brass
Back Panel:	Pass. Aluminum
Radome:	ABS, UV Resistant
Mounting Hardware:	Galvanized Steel
Color:	Gray

Mounting Options

Standard:	DB380 pipe mount kit included.
Downtilt:	DB5083 downtilt bracket, optional.

8635 Stemmons Freeway • Dallas, Texas U.S.A. 75247-3701
Dallas/Ft. Worth Area Tel: 214.631.0310 • Fax: 214.631.4706
Toll Free Tel: 1.800.676.5342 • Fax: 1.800.229.4706

www.decibelproducts.com
dbtech@decibelproducts.com

099089-001 10/01-N



ISO9001 Compliant

General Power Density

Site Name: Hartford NW, CT - Homestead Ave
 Tower Height: 140 ft rad center

Operator	Operating Frequency (MHz)	Number of Trans	ERP Per Trans (watts)	Total ERP (watts)	Distance to Target (feet)	Calculated Power Density (mW/cm ²)	Maximum Permissible Exposure [*] (mW/cm ²)	Fraction of MPE (%)
Verizon	880	9	200	1800	140	0.0330	0.56733	5.82%
VZW/PCS	1900	3	285	855	140	0.0157	1	1.57%
Total Percentage of Maximum Permissible Exposure								7.39%

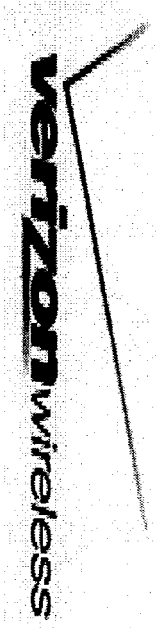
*Guidelines adopted by the FCC on August 1, 1996, 47 CFR Part 1 based on NCRP Report 86, 1986 and generally on ANSI/IEEE C95.1-1992

MHz = Megahertz

mW/cm² = milliwatts per square centimeter

ERP = Effective Radiated Power

Absolute worst case scenario, maximum values used.



General Power Density

Site Name: Hartford N, CT - West Service Road
 Tower Height: 115 ft rad center

Operator	Operating Frequency (MHz)	Number of Trans	ERP Per Trans (watts)	Total ERP (watts)	Distance to Target (feet)	Calculated Power Density (mW/cm ²)	Maximum Permissible Exposure ² (mW/cm ²)	Fraction of MPE (%)
Verizon	880	9	200	1800	115	0.0489	0.56733	8.63%
VZW/PCS	1900	3	285	855	115	0.0232	1	2.32%
Total Percentage of Maximum Permissible Exposure								10.95%

*Guidelines adopted by the FCC on August 1, 1996, 47 CFR Part 1 based on NCRP Report 86, 1986 and generally on ANSI/IEEE C95.1-1992

MHz = Megahertz

mW/cm² = milliwatts per square centimeter

ERP = Effective Radiated Power

Absolute worst case scenario, maximum values used.



General Power Density

Site Name: Forbes St, CT
 Tower Height: 108 ft rad center

Operator	Operating Frequency (MHz)	Number of Trans	ERP Per Trans (watts)	Total ERP (watts)	Distance to Target (feet)	Calculated Power Density (mW/cm ²)	Maximum Permissible Exposure*	Fraction of MPE (%)
Verizon	880	9	200	1800	108	0.0555	0.56733	9.78%
VZW/PCS	1900	3	285	855	108	0.0264	1	2.64%
Total Percentage of Maximum Permissible Exposure								12.42%

*Guidelines adopted by the FCC on August 1, 1996, 47 CFR Part 1 based on NCRP Report 86, 1986 and generally on ANSI/IEEE C95.1-1992

MHz = Megahertz

mW/cm² = milliwatts per square centimeter

ERP = Effective Radiated Power

Absolute worst case scenario, maximum values used.



General Power Density

Site Name: Hawleyville, CT - NEWTOWN
 Tower Height: 140 Ft. rad center

Operator	Operating Frequency (MHz)	Number of Trunks	ERP Per Trunk (watts)	Total ERP (watts)	Distance to Target (feet)	Calculated Power Density (mW/cm ²)	Maximum Permissible Exposure* (mW/cm ²)	Fraction of MPE (%)
Verizon	880	9	200	1800	140	0.0330	0.56733	5.82%
Verizon	1900	3	285	855	140	0.0157	1	1.57%
Total Percentage of Maximum Permissible Exposure								7.39%

*Guidelines adopted by the FCC on August 1, 1996, 47 CFR Part 1 based on NCRP Report 86, 1986 and generally on ANSI/IEEE C95.1-1992

MHz = Megahertz

mW/cm² = milliwatts per square centimeter

ERP = Effective Radiated Power

Absolute worst case scenario, maximum values used.



General Power Density

Site Name: Branford SW, CT
 Tower Height: 112 Ft. rad center

Operator	Operating Frequency (MHz)	Number of Trunks	ERP per Trunk (watts)	Total ERP (watts)	Distance to Target (feet)	Calculated Power Density (mW/cm ²)	Maximum Permissible Exposure (mW/cm ²)	Fraction of MPE (%)
Verizon	880	9	200	1800	112	0.0516	0.56733	9.10%
Verizon	1900	3	285	855	112	0.0245	1	2.45%
Total Percentage of Maximum Permissible Exposure								
								11.55%

*Guidelines adopted by the FCC on August 1, 1996, 47 CFR Part 1 based on NCRP Report 86, 1986 and generally on ANSI/IEEE C95.1-1992

MHz = Megahertz

mW/cm² = milliwatts per square centimeter

ERP = Effective Radiated Power

Absolute worst case scenario, maximum values used.



General Power Density

Site Name: Trumbull SW, CT - ~~BRIDGEPORT~~
 Tower Height: 100 Ft. rad center

Operator	Operating Frequency (MHz)	Number of Trans	ERP Per Trans (watts)	Total ERP (watts)	Distance to Target (feet)	Calculated Power Density (mW/cm ²)	Maximum Permissible Exposure*	Fraction of MPE (%)
Verizon	880	9	200	1800	100	0.0647	0.56733	11.41%
Verizon	1900	3	285	855	100	0.0307	1	3.07%
Total Percentage of Maximum Permissible Exposure								14.48%

*Guidelines adopted by the FCC on August 1, 1996, 47 CFR Part 1 based on NCRP Report 86, 1986 and generally on ANSI/IEEE C95.1-1992

MHz = Megahertz

mW/cm² = milliwatts per square centimeter

ERP = Effective Radiated Power

Absolute worst case scenario, maximum values used.



General Power Density

Site Name: Monroe S, CT
 Tower Height: 165 Ft. rad center

Operator	Operating Frequency	Number of Trans	ERP Per Trans	Total ERP	Distance to Target	Calculated Power Density	Maximum Permissible Exposure*	Fraction of MPE
	(MHz)		(watts)	(watts)	(feet)	(mW/cm ²)	(mW/cm ²)	(%)
Verizon	880	9	200	1800	165	0.0238	0.56733	4.19%
Verizon	1900	3	285	855	165	0.0113	1	1.13%
Total Percentage of Maximum Permissible Exposure								
								5.32%

*Guidelines adopted by the FCC on August 1, 1996, 47 CFR Part 1 based on NCRP Report 86, 1986 and generally on ANSI/IEEE C95.1-1992

MHz = Megahertz

mW/cm² = milliwatts per square centimeter

ERP = Effective Radiated Power

Absolute worst case scenario, maximum values used.



ROBINSON & COLE LLP

KENNETH C. BALDWIN

280 Trumbull Street
Hartford, CT 06103-3597
Main (860) 275-8200
Fax (860) 275-8299
kbaldwin@rc.com
Direct (860) 275-8345

January 16, 2004

Via Hand Delivery

S. Derek Phelps
Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: **Notice of Exempt Modification – Antenna Swap**
305 West Service Road, Hartford, CT
439 Homestead Avenue, Hartford, CT
1455 Forbes Avenue, East Hartford, CT
Fairfield Drive, Newtown, CT
850 West Main Street, Branford, CT
338 Kaechele Place, Bridgeport, CT
88 Main Street, Monroe, CT

RECEIVED
JAN 16 2004
CONNECTICUT
SITING COUNCIL

Dear Mr. Phelps:

Cellco Partnership d/b/a Verizon Wireless (“Cellco”) currently maintains telecommunications facilities at each of the above-referenced tower sites. In each case, Cellco has received approval to install twelve (12) panel-type cellular antennas on the existing tower. Cellco now intends to modify each of these facilities by simply replacing six (6) of the cellular antennas with six (6) PCS antennas.

Please accept this letter as notification pursuant to R.C.S.A. § 16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to the chief elected officials in each municipality.



Law Offices

BOSTON

HARTFORD

NEW LONDON

STAMFORD

GREENWICH

NEW YORK

www.rc.com

As the Council knows, on May 23, 2003, Cellco acquired, from Northcoast Communications, a license to provide PCS service throughout Connecticut. The proposed modifications to each of these tower sites will allow Cellco to provide its customers in Connecticut, with enhanced wireless voice and data services. While these modifications are not significant, Cellco feels compelled to present these modifications to the Council for review.

HART1-1153285-1

S. Derek Phelps
January 16, 2004
Page 2

The planned modifications to the above-referenced facilities fall squarely within those activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2).

1. The proposed modifications will not result in any increase in the overall height of the existing tower structure. Cellco's replacement antennas will be mounted at the same level as their existing antennas.
2. The proposed modifications will not affect any ground-mounted equipment and will not require the extension of the site boundaries.
3. The proposed modifications will not increase noise levels at the facility by six decibels or more.
4. The proposed modifications will not result in radio frequency (RF) power density levels at the facilities that exceed the Federal Communications Commission (FCC) adopted safety standard.

For the foregoing reasons, Cellco respectfully submits that the proposed modifications to the above-referenced telecommunications facilities constitute an exempt modification under R.C.S.A. § 16-50j-72(b)(2).

Sincerely,



Kenneth C. Baldwin

cc: Eddie A. Perez, Mayor of Hartford
Timothy D. Larson, Mayor of East Hartford
Herbert C. Rosenthal, First Selectman, Town of Newtown
Anthony J. DaRos, First Selectman, Town of Branford
John M. Fabrizi, Mayor of Bridgeport
Andrew J. Nunn, First Selectman, Town of Monroe
Sandy M. Carter

