STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

IN RE:	:	
	:	
APPLICATION OF CELLCO PARTNERSHIP D/B/A VERIZON WIRELESS FOR A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED FOR THE CONSTRUCTION, MAINTENANCE AND OPERATION OF A WIRELESS TELECOMMUNICATIONS FACILITY AT THE FALLS VILLAGE VOLUNTEER FIRE DEPARTMENT, 188 ROUTE 7 SOUTH, FALLS VILLAGE, CONNECTICUT	:	DOCKET NO. 360
	:	JULY 24, 2008

PRE-FILED TESTIMONY OF ANTHONY WELLS

1.Q. Please describe your background and your role in the Cellco Partnership d/b/a Verizon Wireless ("Cellco") Falls Village application.

A. I have been working as a radio frequency (RF) engineer for the last 18 years working initially for wireless service providers including NYNEX Mobile, now Cellco and Sprint PCS, now Sprint Nextel. In August 2000, I started my own RF consulting and design business called C Squared Systems ("C Squared"). C Squared currently provides RF design services to the wireless industry throughout New England. I have worked closely with Cellco in the build-out of its Litchfield County, Connecticut wireless network and am familiar with Cellco's requirements, goals and objectives throughout its network in general and particularly in Falls Village. I have extensive experience appearing and testifying before the Connecticut Siting Council. A copy of my professional resume is attached hereto as Exhibit 1.

2.Q. What does your testimony address?

A. The purpose of my testimony is to provide general information relating to RF coverage and network design issues, concepts and practices and specific information regarding Cellco's application for a certificate of environmental compatibility and public need for the proposed Falls Village Volunteer Fire Department facility (Council Docket No. 360).

3.Q. Are you familiar with the Docket No. 360 Application?

A. Yes. In addition to the application itself, I have reviewed all exhibits and potential exhibits which are or may be admitted into the record in this docket and have read the transcript from the Council's July 1, 2008 hearing to prepare for my participation in this matter going forward. I have also met with and had several conversations with Alex Restrepo regarding the proposed cell site and understand Cellco's coverage needs and design objectives in the Falls Village area.

4.Q. Are you able to calculate RF emissions levels for specific distances from the tower site? If so, can you provide these calculations including the percentage of the general population safety standard for the closest portion of Dina Jaeger's property at 167 Beebe Hill Road in Falls Village?

A. Yes. The cumulative percentage of the FCC general population safety standard as a function of distance is provided in Exhibit 2, attached. According to information in the record, Ms. Jaeger's home is located at 167 Beebe Hill Road. We have calculated that the distance from the base of the tower to Ms. Jaeger's residential property to be approximately 1290 feet. As indicated in Exhibit 2, the cumulative percentage of the general population safety standard is calculated at 0.25% of the FCC standard at a distance of 1290 feet from the base of the tower. This is a worst-case analysis that assumes no antenna pattern attenuation, no attenuation of

signal due to terrain, foliage or other obstructions and that all channels are transmitting simultaneously at full power.

11.Q. Does this conclude your written testimony?

A. Yes.

The statements above are true and accurate to the best of my knowledge.

July 24, 2008
Date

anthony wells
Anthony Wells

Subscribed and sworn before me this 24 day of July, 2008.

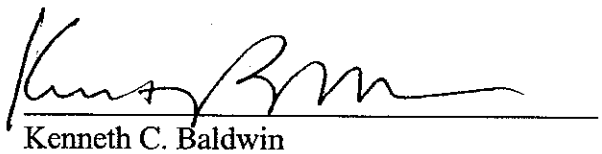
Kenneth C. Baldwin
Commissioner of the Superior Court

CERTIFICATE OF SERVICE

I hereby certify that on the 24th day of July, 2008, a copy of the foregoing was sent via Federal Express and by electronic mail to:

Gabriel North Seymour, P.C.
200 Route 126
Falls Village, CT 06031
certiorari@earthlink.net

Whitney North Seymour, Jr.
425 Lexington Avenue
New York, NY 10017
wseymour@stblaw.com



Kenneth C. Baldwin

Resume of: Anthony Wells

EDUCATION:

Northeastern University
Master of Science in Electrical Engineering - Communications and Signal Processing Concentration- June 1997

University of Massachusetts, Lowell
Bachelor of Science in Electrical Engineering - December 1989

EXPERIENCE:

Managing Partner C Squared Systems **8/00 - Present**

- Provide RF and software design services to the wireless industry, including preparation of RF coverage analyses to determine radio frequency signal propagation parameters for siting wireless telecommunications facilities.
- Development of custom data collection and propagation software for in-building and macro networks,
- Manage design of a digital 1900 MHz (PCS) network consisting of over 130 cell site locations in New Hampshire and Maine.
- Design and Implementation of in-building repeater systems for multiple carriers.
- Prepare documentation for and testify before Connecticut Siting Council in support of the location of new wireless communications facilities.
- Provide measurement and calculation reports to comply with conditions of approval for municipalities in Connecticut, relating to Federal Communications Commission guidelines for electromagnetic field exposure.
- Develop radio and microwave frequency electromagnetic field calculation software for use in Federal Communications Commission compliance analysis.
- Design and implement custom software applications and database solutions with mapping capability for wireless providers.
- Provide propagation analysis and optimization of propagation models for use in analysis of propagation characteristics for low antenna heights.

Radar Systems Engineer **Raytheon - 3/98-8/00**

- Developed radar systems and simulation using software languages such as C++, Matlab and FORTRAN.
- Processed radar data for use in analysis of tracking algorithms. Implemented C++ wrapper for Matlab mex-files to reduce processing time by over 70%.
- Analyzed results of tracking algorithms. Evaluated statistical cost factors and analyzed radar resource loading in relation to statistical confidence levels for tracking algorithms.
- Calibrated and modified radar simulation software to accurately represent radar hardware performance.

Radio Frequency Manager **Sprint PCS - 10/95 - 3/98**

- Technical Manager responsible for implementation of code division multiple access technology for the New Hampshire and Maine systems.
- Designed and managed a digital 1900 MHz (PCS) network consisting of 70 cell site locations in New Hampshire and Maine.
- Oversaw testing and verification of the network to insure that propagation modeling was accurate and design performed as anticipated.
- Evaluated network performance for vendor compliance with contractual obligations.
- Insured compliance with Federal Communications Commission guidelines for electromagnetic field exposure for the digital network.
- Evaluated and tested accuracy of vendor propagation models and their applicability for use in system design.

Radio Frequency Manager **NYNEX Mobile/Verizon Wireless - 5/90 - 10/95**

- Responsible for the design and performance of an analog 800 MHz communication system consisting of over 200 cell sites in New England.
- Responsible for testing and verification of over 100 cell sites to insure accuracy of propagation models and cell site placement.
- Monitored and improved system performance for the Boston and Rhode Island systems using signal measurement equipment and propagation analysis.
- Evaluated and planned deployment of 800 MHz digital cellular system.
- Evaluated feasibility and integrated high and low power repeaters into the network where applicable.
- Designed microprocessor based automated remote call processing test equipment.
- Implemented repeaters as part of in-building network.
- Managed and optimized frequency plan as part of network optimization.

Location:	Falls Village, CT
Date:	07/22/08
Name:	Tony Wells
Antenna Centerline (ft):	150.00

Distance from Antenna Structure Base in Horizontal Plane	0	90	150	200	250	300	500	1000	1290	2000	3000	4000	5000	6000	7000	8000	9000	10000	15000
Cellular Percent of General Population Standard	9.47%	6.96%	4.73%	3.41%	2.51%	1.89%	0.78%	0.21%	0.13%	0.05%	0.02%	0.01%	0.009%	0.006%	0.004%	0.003%	0.003%	0.002%	0.001%
PCS Percent of General Population Standard	9.31%	6.84%	4.65%	3.35%	2.46%	1.86%	0.77%	0.20%	0.12%	0.05%	0.02%	0.01%	0.008%	0.006%	0.004%	0.003%	0.003%	0.002%	0.001%
Total Percent of General Population Standard	18.77%	13.80%	9.39%	6.76%	4.97%	3.75%	1.55%	0.41%	0.25%	0.11%	0.05%	0.03%	0.02%	0.012%	0.009%	0.007%	0.005%	0.004%	0.002%

Exhibit 2