COLLINS, HANNAFIN, GARAMELLA, JABER & TUOZZOLO PROFESSIONAL CORPORATION

ATTORNEYS AT LAW

148 DEER HILL AVENUE, POST OFFICE BOX 440, DANBURY, CONNECTICUT 06813-0440

FRANCIS J. COLLINS
EDWARD J. HANNAFIN
JACK D. GARAMELLA
PAUL N. JABER
JOHN J. TUOZZOLO*
ROBERT M. OPOTZNER
E. O'MALLEY SMITH
THOMAS W. BEECHER
EVA M. DEFRANCO
CHRISTOPHER K. LEONARD
LAURA A. GOLDSTEIN
GREGG A. BRAUNEISEN**
GAIL HAMATY MATTHEWS***
BRYAN V. DOTO**

TELEPHONE (203) 744-2150 EXTENSION: FACSIMILE (203) 791-1126

RIDGEFIELD OFFICE: 24 BAILEY AVENUE RIDGEFIELD, CONNECTICUT 06877 TELEPHONE (203) 438-7403 FACSIMILE (203) 438-7425

INTERNET ADDRESS: HTTP:// WWW.CHGJTLAW.COM PLEASE RESPOND TO DANBURY OFFICE

*Of Counsel

December 10, 2007

Daniel F. Caruso, Chairman CONNECTICUT SITING COUNCIL Ten Franklin Square New Britain, CT 06051

Re: Docket No. 347- 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 Gaylordsville Volunteer Fire Department, New Milford, Connecticut

Dear Chairman Caruso:

On behalf of the Intervenors, Theodore and Ellen Berson, enclosed please find an original and 20 copies of the Testimony of Walter Cooper.

Please contact me with any questions concerning this filing.

Very truly yours,

Thomas W. Beecher

TWB:aar Enclosures

cc: Docket No. 347 Service List

^{**}ALSO ADMITTED IN NEW YORK

^{***}ALSO ADMITTED IN PENNSYLVANIA

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 GAYLORDSVILLE VOLUNTEER FIRE DEPARTMENT, NEW MILFORD, CONNECTICUT

DOCKET NO. 347

December 10, 2007

TESTIMONY OF WALTER A. COOPER

I am a radio frequency consultant with over 35 years experience in radio frequency and telecommunication systems design, installation, and management. A copy of my Curriculum Vitae is attached for reference.

With regard to the application of Cellco Partnership d/b/a Verizon Wireless, it is my opinion that the application is incomplete and, in part, inaccurate. For example, the application states that "...the applicant has performed maximum power density calculations for the proposed...site according to the methodology prescribed by the FCC Office of Engineering and Technology Bulletin No. 65E..." FCC OET Bulletin 65 states, in part, "[w]hen performing an evaluation for compliance with the FCC's RF guidelines all significant contributors of the ambient RF environment should be considered...and applicants are expected to make a good-faith effort to consider these other transmitters." The proposed facility is designed to accommodate the Gaylordsville Volunteer Fire Department and up to three additional wireless carriers, yet the effects of these transmitters were not included in the Applicant's calculations. Therefore the calculations do not comply with the methodology of OET Bulletin No. 65.

The Applicant has indicated in response to interrogatories that it did not perform drive tests at the proposed site. Drive testing generally provides a more accurate indication of coverage along highways than does predictive propagation modeling and drive test data is

necessary for the calibration of the Applicant's propagation model. As a result, the Applicant's propagation modeling may be flawed.

The application failed to adequately address the suitability of several less obtrusive alternate sites. In my opinion, the existing Gaylordsville Methodist Church site is capable of providing coverage similar to that of the proposed site. Several existing CL&P structures, including the one identified by the New Milford Zoning Commission, may provide better coverage than the proposed site, yet the Applicant rejected these sites without providing propagation plots or other data to support its conclusion. Further, the application states the CL&P is an uncooperative owner, yet the Applicant is currently a tenant on several other CL&P facilities.

The Applicant's web site (<u>www.verizonwireless.com/b2c/CoverageLocator</u>) has a map showing that coverage is provided along the entire Route 7 gap described in the application. Presumably, this coverage is provided by a roaming arrangement with another carrier, yet the application does not identify this carrier or the location from which coverage is being provided, nor does it explain why the Applicant could not provide its own coverage from this site.

The application states a willingness to construct a "stealth" facility, yet no descriptions or renderings were provided to aid the Siting Council and the public in visualizing the appearance of the facility.

The Applicant indicated in response to an interrogatory that the proposed facility would cover only 2.4 miles of the 4.1 mile gap it identified along Route 7. Less than 60% coverage of the gap does not seem to justify the environmental impact and obtrusiveness of the proposed facility, especially when existing sites may provide greater coverage. For example, the site identified by the New Milford Zoning Commission has a ground elevation 80 feet greater than the proposed facility with a potential antenna centerline height 10 to 20 feet higher.

In conclusion, it is my opinion that the coverage to be provided by the proposed facility does not justify its negative impact on the community, particularly where at least two alternative sites can provide similar or better coverage in a much less obtrusive manner. The application is also inaccurate and incomplete in the areas noted above. The Council should reject the proposed site.

On Behalf of the Intervenors Theodore and Ellen Berson,

Walter A. Cooper

PROFESSIONAL EXPERIENCE

WALTER A. COOPER

Project Experience:

Mr. Cooper has over 35 years of experience in radio frequency and telecommunication systems design, installation, and management. He has held key positions with the US government, as a principal of Flack + Kurtz Consulting Engineers and as founding principal of AKF Technologies LLC. Some of his accomplishments in the radio frequency field include:

- Development and commercialization of one of the first practical software modeling tools for wireless communications in the Super High and Extremely High Frequency bands.
- Responsible for more than 50 wireless investigations, site selection and placement cases for towns, property owners and regional planning authorities.
- Appearance as an expert witness in wireless cases before planning authorities, boards and the courts.
- Responsible for the technical design, business case, and implementation oversight of Berkshire Connect, an innovative network of digital microwave, millimeter wave and optical fiber facilities. The project was cited by the Chairman of the FCC as a "national model" for regional telecommunications development.

Telecommunications and Radio Frequency Planning Projects

- County of Arlington, VA
- James Madison Univ. College of Integrated Science & Technology, Harrisonburg, VA
- Connect One Georgia
- Western North Carolina Public Bandwidth Initiative
- Mercer University Enterprise Center Macon and Atlanta, GA
- City of Signal Hill, CA
- Town of Egremont, MA
- Town of Southold, NY
- Digital Microwave Corporation
- Housatonic Valley Association
- Dutchess County Planning Federation, NY
- Town of Brookline, MA
- Patterson, NJ Cyber District
- Berkshire Connect, Berkshire Regional Planning Commission, MA
- Franklin Connect, Franklin Regional Council of Governments, MA
- Tech Commons, Southfield, MI
- Northwestern Connecticut Council of Governments
- Cape Cod Commission, MA
- Berkshire Natural Resources Council, MA
- Berkshire-Litchfield Environmental Council

- Town of Cape Elizabeth, ME
- Scenic Hudson, NY
- Global Crossings/Equal Access Network, Springfield MA
- Connecticut Federation of Planning and Zoning Agencies
- Center for the New West, Denver, CO
- Lonestar Gas, Dallas, TX
- Ebasco Services, New York, NY
- Con Edison, New York, NY
- U.S. West Advanced Technology Center, Denver, CO
- Hutcheson Telecommunications Ltd., Hong Kong
- Union Switch & Signal Research Center, Pittsburgh, PA
- Newark Digital Century Building, Newark, NJ

Cellular and PCS Facility Placement Cases

- Town of Williamstown, MA
- Town of Brookline, MA
- Town of Stockbridge, MA
- Town of West Stockbridge, MA
- Town of Lenox, MA
- Town of Great Barrington, MA
- Town of Monterey, MA
- Town of Egremont, MA
- Town of North East, NY
- Town of Philipstown, NY
- Town of Mohawk, NY
- Town of Lebanon, NY
- Town of Pound Ridge, NY
- Town of Woodstock, NY
- Town of Wappinger, NY
- Town of LaGrange, NY
- Town of New Castle, NY
- Town of Clarkstown, NY

- Village of Munsey Park, NY
- Village of Mamaranek, NY
- Village of Tarrytown, NY
- Village of Briarcliff Manor, NY
- Village of Upper Nyack, NY
- Town of Islip, NY
- 7th Avenue Associates, New York, NY
- Manhattan Place, New York, NY
- Town of Litchfield, CT
- Town of Sharon, CT
- Town of Hamden, CT
- Town of New Milford, CT
- City of Torrington, CT
- Town of Farmington, CT
- Town of Washington, CT
- Palisades Interstate Park Commission
- Housatonic Valley Association, CT

Related Wireless Technology Projects

- Telefonica R& D Headquarters Facility, Madrid Spain
- Polytechnic Univ., Center for Advanced Telecommunications Technology, NY
- Bell Labs Renovation, Murray Hill, NJ
- General Electric Executive Education Center, Ossining, NY
- Yale University Sterling Law School, New Haven, CT
- Yale University School of Music, New Haven, CT

- University of Maryland School of Law, Baltimore, MD
- Case Western Reserve University, Cleveland, OH
- Lehigh University Campus Network, Bethlehem, PA

Education:

B.S., United States Military Academy
M.B.A. (Management Information Systems), University of Georgia
Diploma, Command, Control & Communications, Armed Forces Staff College
Diploma, US Army Command and General Staff College

Lectures/Publications

A noted expert in his field, Mr. Cooper has presented lectures in telecommunications at the Princeton University Graduate School of Architecture, New York University and the James Madison University College of Integrated Science and Technology. He has conducted many seminars on telecommunications for various industry groups, including:

- American Institute of Architects
- Boston Society of Architects
- Society of College and University Planners
- American Association of Hospital Engineers
- Institute for International Research
- International Development Research Council
- Construction Specification Institute
- Men/Women in Telecommunications

Mr. Cooper is Associate Editor of McGraw-Hill's *Timesaver Standards: Architectural Fundamentals and Design Data, 7th Edition* and is a contributing author to McGraw Hill's *Timesaver Standards for Urban Design.* He is principal author of the DMC *Digital Microwave Path Analysis Program* and has also written numerous articles for such journals as:

- Business Communications Review
- Communications News
- Consulting-Specifying Engineer
- Construction Specifier
- Architectural Record
- Building Design & Construction
- New York Construction News
- Crain's New York Business