STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

The Connecticut Light & Power Company Application for a Certificate of Environmental Compatibility and Public Need for the Stamford Reliability Cable Project, which consists of construction, maintenance, and operation of a new 115-kV underground transmission circuit extending approximately 1.5 miles between Glenbrook and South End Substations, Stamford, Connecticut and related substation improvements.	DOCKET NO. 435 March 21, 2013

Resumes of CL&P Witnesses Filing Direct Testimony
and Potential Additional Witnesses

Witnesses: Raymond Gagnon, P.E.
Peter Novak

Potential Additional Witnesses:

1. William H. Bailey, Ph.D.
2. Anuj Mathur, PMP
3. Amanda Mayhew
4. Robert J. Russo, P.E.
5. Christopher Paul Soderman, P.E.
6. Christopher Swan

RAYMOND GAGNON

Director Transmission Projects
Northeast Utilities System

107 Selden St
Berlin, CT 06037

BACKGROUND

Mr. Gagnon is the Director Transmission Projects responsible for project management of transmission projects in the three-state service area for Northeast Utilities. Mr. Gagnon has worked for Northeast Utilities for 28 years in various positions throughout his career.

EXPERIENCE

2008 – Present Northeast Utilities Berlin, CT

Director Transmission Projects

- Responsible for project management of transmission projects in the three-state service area for Northeast Utilities. Responsible for the overall aspects of Transmission Projects management including: project estimating, forecasting, scheduling, contract evaluation, contract administration, project execution, and project closeout. Responsible for the administration of the Transmission Contracts and Project Cost & Scheduling departments.

2003–2008 Northeast Utilities Berlin, CT

Project Manager

- Responsible for managing transmission infrastructure projects in Connecticut and Massachusetts. Primary responsibility is to oversee the project life cycle of an assigned project from the early planning stages through siting/permitting, implementation, follow-up reporting, and Closeout. Responsible for transmission substation and transmission line construction projects.

1995–2002 Northeast Utilities Berlin, CT

Senior Engineer

- Responsible for managing telecommunications projects in Connecticut, Massachusetts and New Hampshire. Primary responsibility is to engineer and design mobile radio, microwave and lightwave telecommunication systems in support of the primary business. Responsible for designing, procurement, siting & permitting, constructing and close out of telecommunication facilities projects.

1988-1995 Northeast Utilities Meriden, CT

Engineer

- For the Telecommunication Department, primary responsible for engineering assignments in support of design, construction, operation and maintenance of telecommunication projects.

1984–1987 Northeast Utilities Berlin, & Meriden, CT

Associate/Assistant Engineer

- For the System Test Department performed engineering assignments supporting the operation and maintenance of process computer systems operated by generation facilities, CONVEX operations center, and the NEPOOL/NEPEX operations center.

EDUCATION

1980-1984 Rensselear Polytechnic Institute Troy, NY

- Bachelor of Science Electrical Engineering

1990-1994 University of New Haven New Haven, CT

- Masters of Business Administration

2002-2003 George Washington University Washington, DC

- Masters Certificate in Project Management

PROFESSIONAL LICENSES/CERTIFICATIONS

Registered Professional Engineer

- Connecticut (# 16704)
- Massachusetts (# 37267)

Certified Project Management Professional (PMP)

- PMP (# 234980)

Cell (860) 478-6722
Work (860) 665-6500
Work peter.novak@nu.com

Peter Andrew Novak

Education:

University of Rhode Island (Kingston, RI)
Bachelor of Science Degree in Civil Engineering

University of Connecticut (West Hartford, CT)
Master of Business Administration

Relevant Work Experience:

1973-1979 and 2001-Present Northeast Utilities Service Co (NUSCO)
Senior Engineer – Transmission Line & Civil Engineering: Engineering and support for design of new transmission lines and operation and maintenance of existing transmission lines.

Current Engineering Assignments:

- Underground Transmission Line Subject Matter Expert
- ConnDOT Underground Construction Coordinator/Liaison

Current Project Assignments:

- New England East – West Solution (NEEWS 345-kV)
  Interstate Reliability Project (2008-Present – T-Line Engineer, CT)
- Stamford Reliability Cable Project (2010-Present – T-Line Engineer, CT)

Completed Projects:

- Middletown-Norwalk 345-kV Transmission Line Project (2001-2008)
  Transmission Line Engineer (T-Line Engineer, CT)
- Bethel-Norwalk 345-kV Transmission Line Project (2001-2002)
  Transmission Line Engineer (T-Line Engineer, CT)
- Triangle-Middle River 115-kV Transmission Line Project (1973-1975)
  Transmission Line Engineer (T-Line Engineer, CT)
- Southwest Hartford-Northwest Hartford 115-kV Transmission Line Project (1973-1975) Transmission Line Engineer (T-Line Engineer, CT)
- South Meadow-Southwest Hartford 115-kV Transmission Line Project (1973-1975) Transmission Line Engineer (T-Line Engineer, CT)

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William H. Bailey, Ph.D.

Principal Scientist

Professional Profile

Dr. William H. Bailey is a Principal Scientist in Exponent's Health Sciences practice. Dr. Bailey specializes in applying state-of-the-art assessment methods to environmental and occupational health issues. His 30 years of training and experience include laboratory and epidemiologic research, health risk assessment, and comprehensive exposure analysis. Dr. Bailey has investigated exposures to alternating current, direct current, and radiofrequency electromagnetic fields, 'stray voltage', and electrical shock, as well as to a variety of chemical agents and air pollutants. He is particularly well known for his research on potential health effects of electromagnetic fields and has served as an advisor to numerous state, federal, and international agencies. Currently, he is involved in research on exposures to marine life from submarine cables and respiratory exposures to ultrafine- and nanoparticles. Dr. Bailey is a visiting scientist at the Cornell University Medical College and has lectured at Rutgers University, the University of Texas (San Antonio), and the Harvard School of Public Health. He was formerly Head of the Laboratory of Neuropharmacology and Environmental Toxicology at the New York State Institute for Basic Research, Staten Island, New York, and an Assistant Professor and NIH postdoctoral fellow in Neurochemistry at The Rockefeller University in New York.

Academic Credentials and Professional Honors

Ph.D., Neuropsychology, City University of New York, 1975
M.B.A., University of Chicago, 1969
B.A., Dartmouth College, 1966

Sigma Xi; The Institute of Electrical and Electronics Engineers/International Committee on Electromagnetic Safety (Subcommitee 3, Safety Levels with Respect to Human Exposure to Fields (0 to –3 kHz) and Subcommittee 4, Safety Levels with Respect to Human Exposure to Radiofrequency Fields (3 kHz to 3 GHz); Elected member of the Committee on Man and Radiation (COMAR) of the IEEE Engineering in Medicine and Biology Society, 1998–2001

Publications

Perez V, Alexander DD, Bailey WH. Air ions and mood outcomes: a review and meta-analysis. BMC Psychiatry 2013 Jan 15; 13(1):29. [Epub ahead of print].

Bailey WH, Johnson GB, Bishop J, Hetrick T, Su S. Measurements of charged aerosols near ±500 kV DC transmission lines and in other environments. IEEE Transactions on Power Delivery 2012; 27:371–379.

Shkolnikov YP, Bailey WH. Electromagnetic interference and exposure from household wireless networks. 2011 IEEE Symposium on Product Compliance Engineering (PSES), October 1–5, 2011.

Kavet R, Bailey WH, Bracken TD, Patterson RM. Recent advances in research relevant to electric and magnetic field exposure guidelines. Bioelectromagnetics 2008; 29:499–526.

Bailey WH, Wagner M. IARC evaluation of ELF magnetic fields: Public understanding of the 0.4μT exposure metric. Journal of Exposure Science and Environmental Epidemiology 2008; 18:233–235.

Bailey WH, Erdreich L. Accounting for human variability and sensitivity in setting standards for electromagnetic fields. Health Physics 2007; 92:649–657.

Bailey WH, Nyenhuis JA. Thresholds for 60-Hz magnetic field stimulation of peripheral nerves in human subjects. Bioelectromagnetics 2005; 26:462–468.

Bracken TD, Senior RS, Bailey WH. DC electric fields from corona-generated space charge near AC transmission lines. IEEE Transactions on Power Delivery 2005; 20:1692–1702.

Bailey WH. Dealing with uncertainty in formulating occupational and public exposure limits. Health Physics 2002; 83:402–408.

Bailey WH. Health effects relevant to the setting of EMF exposure limits. Health Physics 2002; 83:376–386.

Kavet R, Stuchly MA, Bailey WH, Bracken TD. Evaluation of biological effects, dosimetric models, and exposure assessment related to ELF electric- and magnetic-field guidelines. Applied Occupational and Environmental Hygiene 2001; 16:1118–1138.

Bailey WH. ICNIRP recommendation for limiting public exposure to 4 Hz–1 kHz electric and magnetic fields. Health Physics1999; 77:97–98.

Bailey WH. Principles of risk assessment with application to current EMF risk communication issues. In: EMF Risk Perception and Communication. Repacholi MH, Muc AM (eds), World Health Organization, Geneva, 1999.

De Santo RS, Bailey WH. Environmental justice tools and assessment practices. Proceedings, American Public Transit Association, 1999.

Bailey WH, Su SH, Bracken TD. Probabilistic approach to ranking sources of uncertainty in ELF magnetic field exposure limits. Health Physics 1999; 77:282–290.

Bailey WH. Field parameters. Proceedings, EMF Engineering Review Symposium, Status and Summary of EMF Engineering Research. Bracken TD and Montgomery JH (eds), Oak Ridge National Laboratory, Oak Ridge, TN, April 28–29, 1998.

Bailey WH. Policy implications. Proceedings, EMF Engineering Review Symposium, Status and Summary of EMF Engineering Research. Bracken TD and Montgomery JH (eds), Oak Ridge National Laboratory, Oak Ridge, TN, April 28–29, 1998.

Bailey WH. Probabilistic approaches to deriving risk-based exposure guidelines: Application to extremely low frequency magnetic fields. In: Non-Ionising Radiation. Dennis JA and Stather JW (eds), Special Issue of Radiation Protection Dosimetry 1997; 72:327–336.

Bailey WH, Su SH, Bracken TD, Kavet R. Summary and evaluation of guidelines for occupational exposure to power frequency electric and magnetic fields. Health Physics 1997; 73:433–453.

Bracken TD, Senior RS, Rankin RF, Bailey WH, Kavet R. Magnetic field exposures in the electric utility industry relevant to occupational guideline levels. Applied Occupational and Environmental Hygiene 1997; 12:756–768.

Blondin J-P, Nguyen D-H, Sbeghen J, Goulet D, Cardinal C, Maruvada P-S, Plante M, and Bailey WH. Human perception of electric fields and ion currents associated with high voltage DC transmission lines. Bioelectromagnetics 1996; 17:230–241.

Bailey WH, Charry JM. Acute exposure of rats to air ions: Effects on the regional concentration and utilization of serotonin in brain. Bioelectromagnetics 1987; 8:173–181.

Bailey WH, Charry JM. Measurement of neurotransmitter release and utilization in selected brain regions of rats exposed to dc electric fields and atmospheric space charge. Proceedings, 23rd Hanford Life Sciences Symposium, Interaction of Biological Systems with Static and ELF Electric and Magnetic Fields, 1987.

Pavildes C, Aoki C, Chen J-S, Bailey WH, Winson J. Differential glucose utilization in the parafascicular region during slow-wave sleep, the still-alert state and locomotion. Brain Research 1987; 423:399–402.

Bailey WH, Charry JM. Behavioral monitoring of rats during exposure to air ions and DC electric fields. Bioelectromagnetics 1986; 7:329–339.

Charry JM, Shapiro MH, Bailey WH, Weiss JM. Ion-exposure chambers for small animals. Bioelectromagnetics 1986; 7:1–11.

Charry JM, Bailey WH. Regional turnover of norepinephrine and dopamine in rat brain following acute exposure to air ions. Bioelectromagnetics 1985; 6:415–425.

Bracken TD, Bailey WH, Charry JM. Evaluation of the DC electrical environment in proximity to VDTs. Journal of Environmental Science and Health Part A 1985; 20:745–780.

Gross SS, Levi R, Bailey WH, Chenouda AA. Histamine modulation of cardiac sympathetic responses: A physiological role. Federation Proceedings 1984; 43:458.

Gross SS, Guo ZG, Levi R, Bailey WH, Chenouda AA. 1984. Release of histamine by sympathetic nerve stimulation in the guinea pig heart and modulation of adrenergic responses. Circulation Research 1984; 54:516–526.

Dahl D, Bailey WH, Winson J. Effect of norepinephrine depletion of hippocampus on neuronal transmission from perforant pathway through dentate gyrus. Journal of Neurophysiology 1983; 49:123–135.

Guo ZG, Gross SS, Levi R, Bailey WH. Histamine: Modulation of norepinephrine release from sympathetic nerves in guinea pig heart. Federation Proceedings 1983; 42:907.

Bailey WH. Biological effects of air ions on serotonin metabolism: Fact and fancy. pp. 90–120. In: Conference on Environmental Ions and Related Biological Effects. Charry JM (ed), American Institute of Medical Climatology, Philadelphia, PA, 1982.

Weiss JM, Goodman PA, Losito BG, Corrigan S, Charry JM, Bailey WH. Behavioral depression produced by an uncontrollable stressor: Relationship to norepinephrine, dopamine, and serotonin levels in various regions of rat brain. Brain Research Reviews 1981; 3:167–205.

Bailey WH. Ion-exchange chromatography of creatine kinase isoenzymes: A method with improved specificity and sensitivity. Biochemical Medicine 1980; 24:300–313.

Bailey WH, Weiss JM. Evaluation of a 'memory deficit' in vasopressin-deficient rats. Brain Research 1979; 162:174–178.

Bailey WH, Weiss JM. Effect of ACTH 4-10 on passive avoidance of rats lacking vasopressin (Brattleboro strain). Hormones and Behavior 1978; 10:22–29.

Pohorecky LA, Newman B, Sun J, Bailey WH. Acute and chronic ethanol injection and serotonin metabolism in rat brain. Journal of Pharmacology and Experimental Therapeutics 1978; 204:424–432.

Koh SD, Vernon M, Bailey WH. Free-recall learning of word lists by prelingual deaf subjects. Journal of Verbal Learning and Verbal Behavior 1971; 10:542–574.

Book Chapters

Bailey WH. Principles of risk assessment and their limitations. In: Risk Perception, Risk Communication and its Application to EMF Exposure. Matthes R, Bernhardt JH, Repacholi MH (eds), International Commission on Non-Ionizing Radiation Protection, Oberschleißheim, Germany, 1998.

Bailey WH. Biological responses to air ions: Is there a role for serotonin? pp. 151–160. In: Air Ions: Physical and Biological Aspects. Charry JM and Kavet R (eds), CRC Press, Boca Raton, FL, 1987.

Weiss JM, Bailey WH, Goodman PA, Hoffman LJ, Ambrose MJ, Salman S, Charry JM. A model for neurochemical study of depression. pp. 195–223. In: Behavioral Models and the Analysis of Drug Action. Spiegelstein MY, Levy A (eds), Elsevier Scientific, Amsterdam, 1982.

Bailey WH. Mnemonic significance of neurohypophyseal peptides. pp. 787–804. In: Changing Concepts of the Nervous System. Morrison AR, Strick PL (eds), Academic Press, New York, NY, 1981.

Bailey WH, Weiss, JM. Avoidance conditioning and endocrine function in Brattleboro rats. Pp 371–395. In: Endogenous Peptides and Learning and Memory Process. Martinez JL, Jensen RA, Messing RB, Rigter H, McGaugh JL (eds), Academic Press, New York, NY, 1981.

Weiss JM, Glazer H, Pohorecky LA, Bailey WH, Schneider L. Coping behavior and stress-induced behavioral depression: Studies of the role of brain catecholamines. pp. 125–160. In: The Psychobiology of the Depressive Disorders: Implications for the Effects of Stress. Depue R (ed), Academic Press, New York, NY, 1979.

Technical Reports

Normandeau, Exponent, Tricas T, Gill A. Effects of EMFs from undersea power cables on elasmobranchs and other marine species. U.S. Dept. of the Interior, Bureau of Ocean Energy Management, Regulation, and Enforcement, Pacific OCS Region, Camarillo, CA. OCS Study BOEMRE 2011-09, May 2011.

Jardini JA, et al. Electric field and ion current environment of HVDC overhead transmission lines. Report of Joint Working Group B4/C3/B2.50, CIGRÉ, August 2011.

Johnson GB, Bracken TD, Bailey WH. Charging and transport of aerosols near AC transmission lines: A literature review. EPRI, Palo Alto, CA, 2003.

Bailey WH. Probabilistic approach to ranking sources of uncertainty in ELF magnetic-field exposure limits. In: Evaluation of Occupational Magnetic Exposure Guidelines, Interim Report, EPRI Report TR-111501, 1998.

Bracken TD, Bailey WH, Su SH, Senior RS, Rankin RF. Evaluation of occupational magnetic-field exposure guidelines; Interim Report. EPRI Report TR-108113, 1997.

Bailey WH, Weil DE, Stewart JR. HVDC Power Transmission Environmental Issues Review. Oak Ridge National Laboratory, Oak Ridge, TN, 1996.

Bailey WH. Melatonin responses to EMF. Proceedings, Health Implications of EMF Neural Effects Workshop, Report TR-104327s, EPRI, 1994.

Bailey WH. Recent neurobiological and behavioral research: Overview of the New York State powerlines project. In: Power-Frequency Electric and Magnetic Field Research, EPRI, 1989.

Bailey WH, Bissell M, Dorn CR, Hoppel WA, Sheppard AR, Stebbings, JH. Comments of the MEQB Science Advisors on Electrical Environment Outside the Right of Way of CU-TR-1, Report 5. Science Advisor Reports to the Minnesota Environmental Quality Board, 1986.

Bailey WH, Bissell M, Brambl RM, Dorn CR, Hoppel WA, Sheppard AR, Stebbings JH. A health and safety evaluation of the +/- 400 KV powerline. Science Advisor's Report to the Minnesota Environmental Quality Board, 1982.

Charry JM, Bailey WH, Weiss JM. Critical annotated bibliographical review of air ion effects on biology and behavior. Rockefeller University, New York, NY, 1982.

Bailey WH. Avoidance behavior in rats with hereditary hypothalamic diabetes insipidus. Dissertation, City University of New York, 1975.

Selected Invited Presentations

Bailey WH. Measurements of charged aerosols around DC transmission lines and other locations. International Committee on Electromagnetic Safety TC95/ Subcommittee 3: Safety Levels with Respect to Human Exposure to Electromagnetic Fields, 0 – 3 kHz, December 2011.

Bailey WH, Erdreich LS. Human sensitivity and variability in response to electromagnetic fields: Implications for standard setting. International Workshop on EMF Dosimetry and Biophysical Aspects Relevant to Setting Exposure Guidelines. International Commission on Non-Ionizing Radiation Protection, Berlin, March 2006.

Bailey WH. Research-based approach to setting electric and magnetic field exposure guidelines (0-3000 Hz). IEEE Committee on Electromagnetic Safety, December 2005.

Bailey WH. Conference Keynote Presentation. Research supporting 50/60 Hz electric and magnetic field exposure guidelines. Canadian Radiation Protection Association, Annual Conference, Winnipeg, June 2005.

Bailey WH. Scientific methodology for assessing public health issues: A case study of EMF. Canadian Radiation Protection Association, Annual Conference, Public Information for Teachers, Winnipeg, June 2005.

Bailey WH. Assessment of potential environmental effects of electromagnetic fields from submarine cables. Connecticut Academy of Science and Engineering, Long Island Sound Bottomlands Symposium: Study of Benthic Habitats, July 2004.

De Santo RS, Coe M, Bailey WH. Environmental justice assessment and the use of GIS tools and methods. National Association of Environmental Professionals, 27th Annual Conference, Dearborn, MI, June 2002.

Bailey WH. Applications to enhance safety: Research to understand and control potential risks. Human Factors and Safety Research, Volpe National Transportation Systems Center/Dutch Ministry of Transport, Cambridge, MA, November 2000.

Bailey WH. EMF health effects review. EMF Exposure Guideline Workshop, Brussels Belgium, June 2000.

Bailey WH. Dealing with uncertainty when formulating guidelines. EMF Exposure Guideline Workshop, Brussels Belgium, June 2000.

Bailey WH. Field parameters: Policy implications. EMF Engineering Review Symposium, Status and Summary of EMF Engineering Research, Charleston, SC, April 1998.

Bailey WH. Principles of risk assessment: Application to current issues. Symposium on EMF Risk Perception and Communication, World Health Organization, Ottawa, Canada, August 1998.

Bailey WH. Current guidelines for occupational exposure to power frequency magnetic fields. EPRI EMF Seminar, New Research Horizons, March 1997.

Bailey WH. Methods to assess potential health risks of cell telephone electromagnetic fields. IBC Conference—Cell Telephones: Is there a Health Risk? Washington, DC, June 1997.

Bailey WH. Principles of risk assessment and their limitations. Symposium on Risk Perception, Risk Communication and its Application to EMF Exposure, International Commission on Non-Ionizing Radiation Protection, Vienna, Austria, October 1997.

Bailey WH. Probabilistic approach for setting guidelines to limit induction effects. IEEE Standards Coordinating Committee 28: Non-Ionizing Radiation, Subcommittee 3 (0–3 kHz), June 1997.

Bailey WH. Power frequency field exposure guidelines. IEEE Standards Coordinating Committee 28: Non-Ionizing Radiation, Subcommittee 3 (0–3 kHz), June 1996.

Bailey WH. Epidemiology and experimental studies. American Industrial Hygiene Conference, Washington, DC, May 1996.

Bailey WH. Review of 60 Hz epidemiology studies. EMF Workshop, Canadian Radiation Protection Association, Ontario, Canada, June 1993.

Bailey WH. Biological and health research on electric and magnetic fields. American Industrial Hygiene Association, Fredrickton, New Brunswick, Canada, October 1992.

Bailey WH. Electromagnetic fields and health. Institute of Electrical and Electronics Engineers, Bethlehem, PA, January 1992.

Bailey WH, Weiss JM. Psychological factors in experimental heart pathology. Visiting Scholar Presentation, National Heart Lung and Blood Institute, March 1977.

Presentations

Perez V, Alexander DD, Bailey WH. Air ions and mood outcomes: A review and meta-analysis. Poster presentation at the American College of Epidemiology, Chicago, IL, September 8–11, 2012.

Shkolnikov Y, Bailey WH. Electromagnetic interference and exposure from household wireless networks. Product Safety Engineering Society Meeting, San Diego, CA October 2011.

Nestler E, Trichas T, Pembroke A, Bailey W. Will undersea power cables from offshore wind projects affect sharks? North American Offshore Wind Conference & Exhibition, Atlantic City, NJ, October 2010.

Nestler E, Pembroke A, Bailey W. Effects of EMFs from undersea power lines on marine species. Energy Ocean International, Ft. Lauderdale, FL, June 2010.

Pembroke A, Bailey W. Effects of EMFs from undersea power cables on elasmobranchs and other marine species. Windpower 2010 Conference and Exhibition, Dallas, TX, 2010.

Bailey WH. Clarifying the neurological basis for ELF guidelines. Workshop on Practical Implementation of ELF and RF Guidelines. The Bioelectromagnetics Society 29th Annual Meeting, Kanazawa, Japan, June 2007.

Sun B, Urban B, Bailey W. AERMOD simulation of near-field dispersion of natural gas plume from accidental pipeline rupture. Air and Waste Management Association: Health Environments: Rebirth and Renewal, New Orleans, LA, June 2006.

Bailey WH, Johnson G, Bracken TD. Method for measuring charge on aerosol particles near AC transmission lines. Joint Meeting of The Biolectromagnetics Society and The European BioElectromagnetics Association, Dublin Ireland, June 2005.

Bailey WH, Bracken TD, Senior RS. Long-term monitoring of static electric field and space charge near AC transmission Lines. The Bioelectromagnetics Society, 26th Annual Meeting, Washington, DC, June 2004.

Bailey WH, Erdreich L, Waller L, Mariano K. Childhood leukemia in relation to 25-Hz and 60-Hz magnetic fields along the Washington DC—Boston rail line. Society for Epidemiologic Research, 35th Annual Meeting, Palm Desert CA, June 2002. American Journal of Epidemiology 2002; 155:S38.

Erdreich L, Klauenberg BJ, Bailey WH, Murphy MR. Comparing radiofrequency standards around the world. Health Physics Society 43rd Annual Meeting, Minneapolis, MN, July 1998.

Bracken TD, Senior RS, Rankin RF, Bailey WH, Kavet R. Relevance of occupational guidelines to utility worker magnetic-field exposures. Second World Congress for Electricity and Magnetism in Biology and Medicine, Bologna, Italy, June 1997.

Weil DE, Erdreich LS, Bailey WH. Are 60-Hz magnetic fields cancer causing agents? Mechanisms and Prevention of Environmentally Caused Cancers, The Lovelace Institutes 1995 Annual Symposium, La Fonda, Santa Fe, NM, October 1995.

Bailey WH. Neurobiological research on extremely-low-frequency electric and magnetic fields: A review to guide future research. Sixteenth Annual Meeting of the Bioelectromagnetics Society, Copenhagen, Denmark, June 1994.

Blondin J-P, Nguyen D-H, Sbeghen J, Maruvada PS, Plante M, Bailey WH, Goulet D. The perception of DC electric fields and ion currents in human observers. Annual Meeting of the Canadian Psychological Association, Penticton, British Columbia, Canada, June 1994.

Erdreich LS, Bailey WH, Weil DE. Science, standards and public policy challenges for ELF fields. American Public Health Association 122nd Annual Meeting, Washington, DC, October 1994.

Bailey WH, Charry JM. Particle deposition on simulated VDT operators: Influence of DC electric fields. 10th Annual Meeting of the Bioelectromagnetics Society, June 1988.

Charry JM, Bailey WH. Contribution of charge on VDTs and simulated VDT operators to DC electric fields at facial surfaces. 10th Annual Meeting of the Bioelectromagnetics Society, June 1988.

Bailey WH, Charry, JM. Dosimetric response of rats to small air ions: importance of relative humidity. EPRI/DOE Contractors Review, November 1986. Charry JM, Bailey WH, Bracken TD (eds). DC electric fields, air ions and respirable particulate levels in proximity to VDTs. International Conference on VDTs and Health, Stockholm, Sweden, June 12–15 1986.

Charry JM, Bailey WH. Air ion and DC field strengths at 10^4 ions/cm^3 in the Rockefeller University Small Animal Exposure Chambers. EPRI/DOE Contractors Review, November 1985.

Charry JM, Bailey WH. DC Electrical environment in proximity to VDTs. 7th Annual Meeting of the Bioelectromagnetics Society, June 1985.

Bailey WH, Collins RL, Lahita RG. Cerebral lateralization: Association with serum antibodies to DNA in selected bred mouse lines. Society for Neuroscience, 1985.

Kavet R, Bailey WH, Charry JM. Respiratory neuroendocrine cells: A plausible site for air ion effects. Seventh Annual Meeting of The Bioelectromagnetics Society, June 1985.

Bailey WH, Charry JM. Measurement of neurotransmitter release and utilization in selected brain regions of rats exposed to DC electric fields and atmospheric space charge. 23rd Hanford Life Sciences Symposium, Richland, WA, October 1984.

Bailey WH, Charry JM, Weiss JM, Cardle K, Shapiro M. Regional analysis of biogenic amine turnover in rat brain after exposure to electrically charged air molecules (air ions). Society for Neuroscience, 1983.

Bailey WH. Biological effects of air ions: Fact and fancy. American Institute of Medical Climatology Conference on Environmental Ions and Related Biological Effects, October 1982.

Goodman PA, Weiss JM, Hoffman LJ, Ambrose MJ, Bailey WH, Charry, JM. Reversal of behavioral depression by infusion of an A2 adrenergic agonist into the locus coeruleus. Society for Neuroscience, November 1982.

Charry JM, Bailey WH. Biochemical and behavioral effects of small air ions. Electric Power Research Institute Workshop, April 1981.

Bailey WH, Alsonso DR, Weiss JM, Chin S. Predictability: A psychologic/ behavioral variable affecting stress-induced myocardial pathology in the rat. Society for Neuroscience, November 1980.

Salman SL, Weiss JM, Bailey WH, Joh TH. Relationship between endogenous brain tyrosine hydroxylase and social behavior of rats. Society of Neuroscience, November 1980.

Bailey WH, Maclusky S. Appearance of creatine kinase isoenzymes in rat plasma following myocardial injury produced by isoproterenol. Fed Assoc Soc Exp Biol, April 1978.

Bailey WH, Maclusky S. Appearance of creatine kinase isoenzymes in rat plasma following myocardial injury by isoproterenol. Fed Proc 1978; 37:889.

Bailey WH, Weiss JM. Effect of ACTH 4-10 on passive avoidance of rats lacking vasopressin (Brattleboro strain). Eastern Psychological Association, April 1976.

Prior Experience

President, Bailey Research Associates, Inc., 1991–2000
Vice President, Environmental Research Information, Inc., 1987–1990
Head of Laboratory of Environmental Toxicology and Neuropharmacology, New York State Institute for Basic Research, 1983–1987
Assistant Professor, The Rockefeller University, 1976–1983

Academic Appointment

- Visiting Fellow, Department of Pharmacology, Cornell University Medical College, New York, NY, 1986–present

Prior Academic Appointments

- Visiting Scientist, The Jackson Laboratory, Bar Harbor, ME, 1984–1985
- Head, Laboratory of Neuropharmacology and Environmental Toxicology, NYS Institute for Basic Research in Developmental Disabilities, Staten Island, NY, 1983–1987
- Assistant Professor, The Rockefeller University, New York, NY, 1976–1983
- Postdoctoral Fellow, Neurochemistry, The Rockefeller University, New York, NY, 1974–1976
- Dissertation Research, The Rockefeller University, New York, NY, 1972–1974
- CUNY Research Fellow, Dept. of Psychology, Queens College, City University of New York, Flushing, NY, 1969–1971
- Clinical Research Assistant, Department of Psychiatry, University of Chicago; Psychiatric Psychosomatic Inst., Michael Reese Hospital, and Illinois State Psychiatric Inst, Chicago, IL, 1968–1969

Teaching Appointments

- Lecturer, University of Texas Health Science Center, Center for Environmental Radiation Toxicology, San Antonio, TX, 1998
- Lecturer, Harvard School of Public Health, Office of Continuing Education, Boston, MA, 1995, 1997
- Lecturer, Rutgers University, Office of Continuing Education, New Brunswick, NJ, 1991–1995
- Adjunct Assistant Professor, Queens College, CUNY, Flushing, NY, 1978
- Lecturer, Queens College, CUNY, Flushing, NY, 1969–1974

Editorship

- Associate Editor, Non-Ionizing Radiation, *Health Physics*, 1996–present

Advisory Positions

- ZonMw – Netherlands Organization for Health Research and Development, 2012; 2007-2008, reviewer for National Programme on EMF and Health
- US Bureau of Ocean Energy Management, Regulation and Enforcement, 2009–2010
- Canadian National Collaborating Centre for Environmental Health, reviewer of Centre reports, 2008
- Island Regulatory and Appeals Commission, province of Prince Edward Island, Canada, 2008
- National Institute of Environmental Health Sciences/ National Institutes of Health, Review Committee, Neurotoxicology, Superfund Hazardous Substances Basic Research and Training Program, 2004
- National Institute of Environmental Health Sciences, Review Committee Role of Air Pollutants in Cardiovascular Disease, 2004
- Working Group on Non-Ionizing Radiation, Static and Extremely Low-Frequency Electromagnetic Fields, International Agency for Research on Cancer, 2000–2002
- Working Group, EMF Risk Perception and Communication, World Health Organization, 1998–2005
- Member, International Committee on Electromagnetic Safety, Subcommittee 3 - Safety Levels with Respect to Human Exposure to Fields (0 to 3 kHz) and Subcommitee 4 - Safety Levels with Respect to Human Exposure (3kHz to 3GHz) Institute of Electrical and Electronics Engineers (IEEE), 1996–present
- Invited participant, National Institute of Environmental Health Sciences EMF Science Review Symposium: Clinical and In Vivo Laboratory Findings, 1998
- Working Group, EMF Risk Perception and Communication, International Commission on Non-Ionizing Radiation Protection, 1997
- U.S. Department of Energy, RAPID EMF Engineering Review, 1997
- Oak Ridge National Laboratory, 1996
- American Arbitration Association International Center for Dispute Resolution, 1995–1996
- U.S. Department of Energy, 1995
- National Institute for Occupational Safety and Health, 1994–1995
- Federal Rail Administration, 1993–1996
- U.S. Forest Service, 1993
- New York State Department of Environmental Conservation, 1993
- National Science Foundation
- National Institutes of Health, Special Study Section—Electromagnetics, 1991–1993
- Maryland Public Service Commission and Maryland Department of Natural Resources, Scientific Advisor on health issues pertaining to HVAC Transmission Lines, 1988–1989
- Scientific advisor on biological aspects of electromagnetic fields, Electric Power Research Institute, Palo Alto, CA, 1985–1989

- U.S. Public Health Service, NIMH: Psychopharmacology and Neuropsychology Review Committee, 1984
- Consultant on biochemical analysis, Colgan Institute of Nutritional Science, Carlsbad, CA, 1982–1983
- Behavioral Medicine Abstracts, Editor, animal behavior and physiology, 1981–1983
- Consultant on biological and behavioral effects of high-voltage DC transmission lines, Vermont Department of Public Service, Montpelier, VT, 1981–1982
- Scientific advisory committee on health and safety effects of a high-voltage DC transmission line, Minnesota Environmental Quality Board, St. Paul, MN, 1981–1982
- Consultant on biochemical diagnostics, Biokinetix Corp., Stamford, CT, 1978–1980

Professional Affiliations

- The Health Physics Society (Affiliate of the International Radiation Protection Society)
- Society for Risk Analysis
- International Society of Exposure Analysis
- New York Academy of Sciences
- American Association for the Advancement of Science
- Air and Waste Management Association
- Society for Neuroscience/International Brain Research Organization
- Bioelectromagnetics Society
- The Institute of Electrical and Electronics Engineers/Engineering in Medicine and Biology Society
- Conseil International des Grands Reseaux Electriques

ANUJ MATHUR, PMP

18 Cobblestone Court, Newington, CT 06111

Home: 860-436-4429 **E-mail: anuj.mathur@nu.com**

OBJECTIVE

A challenging and rewarding career in Project Management working in a team environment.

QUALIFICATIONS SUMMARY

Project Management	Supply Chain Management	Management Consulting
Risk Mitigation	Commodity Management	Contracts, Proposals, RFx Process
Asset Management	Marketing & Sales	Business Applications
Vendor Management	Construction Management	Strategic Sourcing

EDUCATION

MASTER OF BUSINESS ADMINISTRATION (MBA) 2006
University of Phoenix, Westborough, MA

BACHELOR OF SCIENCE, ELECTRICAL ENGINEERING (BSEE) 1997
University of Western Ontario, London, ON, Canada

CONTINUING EDUCATION

CERTIFICATE – PROJECT MANAGEMENT 2008 - present
Boston University, Berlin, CT

CERTIFICATE – BUSINESS MANAGEMENT 2004
University of Massachusetts, Westborough, MA

CERTIFICATE – INFORMATION SYSTEMS MANAGEMENT 2003
Ryerson University, Toronto, ON, Canada

CERTIFICATE – CONTINUING ENGINEERING EDUCATION 1998
University of Toronto, Toronto, ON, Canada

SOFTWARE SKILLS

BUSINESS APPLICATIONS

Word	Excel	PowerPoint
Access	Project	Spend Analysis Tool (BIQ)
Visio	Contract Management Tool (Procuri)	Document Management (RIMS)

ENGINEERING APPLICATIONS

INtools	SmartSketch	Cable and Wire Management
Electrical/Controls (IntEC)	MatLab	Transmission Outage Application (TOA)

LANGUAGES

Java	HTML	Visual Basic

AFFILIATIONS

PROJECT MANAGEMENT INSTITUTE, Boston, MA 2006 – Present
Member

PROFESSIONAL ENGINEERS ONTARIO, Toronto, ON, Canada 2002 – 2004
Member

INSTITUTE OF ELECTRICAL ENGINEERS, Toronto, ON, Canada 1999 – 2002
Member

PROFESSIONAL EXPERIENCE

NORTHEAST UTILITIES SYSTEM, Berlin, CT — June, 2008 – Present

Project Manager – Level 1

- Project Manager: Stamford Reliability Cable Project – Lead project team on a new 1.5 mile underground transmission line project. Responsible for project execution including siting, engineering, construction and commissioning.
- Project Manager: South End Ring Bus Project – Responsible for substation improvement project in Stamford, CT.
- Program Manager: IEC 61850 Program – Develop, execute and ensure organizational 'readiness' for Configuration Control, Training and Development, Communication & Outreach, Information Technology and Implementation
- Program Manager: Cap & Pin & Obsolete Component Replacement Program - Strategize, monitor and execute multi-year, multi-million dollar projects to alleviate a safety concern and to enhance overall system reliability.

BANK OF AMERICA, Providence, RI — February – May, 2008

Business Analyst / Supply Chain Consultant

- Review, evaluate, analyze, and improve supply chain process documentation in accordance with corporate policies.
- Develop and track supply chain performance metrics/controls using MS Excel, MS Word, to ensure audit compliance.

POWER ADVOCATE, INC., Boston, MA — 2007

Manager / Supply Chain Consultant

- Gathered, analyzed and translated procurement requirements into strategic sourcing / supply chain solutions for client engagements that resulted in significant corporate savings.
- Managed commodity market baskets, provided price quotes, verified pricing, and followed-up with vendors throughout bid process through the utilization of e-sourcing tool/spend analysis software tool.

GILBANE BUILDING COMPANY, Providence, RI — 2004 – 2007

Superintendent — 2006 – 2007

- Directed and monitored contractor work on-site for $55 million, 3-floor courthouse.

Project Leader — 2005 – 2006

- Mobilized /supervised team of 15-20 contractors with responsibility for a $3.9 million, 12-floor sprinkler / fire alarm, life safety upgrade renovation.
- Actively led progress meetings, provided status up-dates, and communicated with cross-functional team members that resulted in a successfully completed project on - schedule and within budget.

Senior Office Engineer — 2004 – 2005

- Created RFI, processed submittals, prepared daily / weekly progress reports, and meeting minutes for $168 million, 3.5-mile wastewater tunnel project.

THE MATHWORKS, INC., Natick, MA — 2004

Business Applications Consultant

- Coordinated performance load, regression, data validation, and user acceptance tests, with Business Operations

ATOMIC ENERGY OF CANADA LIMITED, Mississauga, ON, Canada — 1999 – 2003

Electrical Engineer

- Interfaced with engineering department in order to understand software function, troubleshoot software application problems, train new users, and create product enhancements that increased product quality.
- Designed component specification sheets, wiring drawings, and generated Bill of Materials (BOM) from Process / Instrumentation Drawings (P&ID) through the utilization of IntEC software application.

STONE & WEBSTER CANADA LIMITED, Toronto, ON, Canada — 1998 – 1999

Electrical Engineer

- Provided software coordination and Information Technology support for Cable / Wire Management (Oracle DB) and Intergraph product INtools (Informix DB).

IRIS POWER ENGINEERING LIMITED, Toronto, ON, Canada — 1997 – 1998

Sales Engineer

- Authored detailed project proposals to market predictive maintenance technology for large motors across the industry.
- Delivered technical sales presentations at client sites that promoted various products and / or services.

Amanda Mayhew
320 Hill Street
Hamden, Connecticut 06514
(203) 715-0323 amanda.mayhew@nu.com

Experience:

June 2005 to Present — Northeast Utilities — Berlin, CT

Transmission Siting and Permitting- Scientist

Responsible for determining locations and acquiring necessary local, state, and federal permits for transmission capitol projects throughout Connecticut and Massachusetts. In order to best assess environmental permitting needs, the use of GIS software, maps (property, topography and wetland) and a thorough understanding of environmental regulations are essential.

- ◊ Hire and manage environmental consultants for wetland delineations, wildlife and habitat assessments, as well as oversee the assembly of applications to local, state, and federal regulators
- ◊ Develop relationships with key local, state and federal regulatory officials such as the CT DEEP and the Army Corps of Engineers
- ◊ Monitor active construction sites for compliance with permit conditions and erosion controls
- ◊ Manage employee to ensure that transmission maintenance group follows applicable regulations for maintenance work
- ◊ Use ERSI's ArcGIS to assess permit and consultation needs in the beginning of a project
- ◊ Draft and send consultation letters to regulators (CT DEEP, CT SHPO) and collaborate with them to determine mitigation and least environmentally damaging impacts
- ◊ Conduct Phase One Environmental Site Assessments for the sale or acquisition of property
- ◊ Create Development and Management Plans for use at the Connecticut Siting Council and at construction sites using *Connecticut's 2002 Guidelines for Soil Erosion and Sediment Control* and NU Environmental Best Management Practices
- ◊ Testify as lead environmental witness on behalf of NU at Connecticut Siting Council hearing for a new substation
- ◊ Ensure all project requirements, such as five year invasive species monitoring, are documented and the requirement is met

January 2009 to March 2011 — Northeast Utilities — Berlin, CT

Transmission Project Management Job Share

As part of the job share program, allocated 25% of time to Optical Groundwire Replacement Program to replace 75 miles of OPGW on the Connecticut Light & Power transmission system.

- ◊ Responsible for a project spend of $11 million. Monthly reporting to vice-presidents and directors on spend and project risks.
- ◊ Developed and led an internal cross-functional team as well as external contractors
- ◊ Followed Project Management Handbook throughout the project to ensure that all policies were followed and adhered to

June 2003 to June 2005 — Northeast Utilities — Berlin, CT

Real Estate and Land Planning- Technical Associate

- ◊ Worked with customers regarding environmental concerns (ie: unkempt company property, illegal dumping, motorized vehicle trespass)
- ◊ Assisted in administering NU's Hunting Program which entailed issuing permits and answering customer questions about the program
- ◊ Hired and managed landscape and construction contractors to resolve customer complaints
- ◊ Gained understanding of utility land use needs and gained experience in reviewing property records

Education:

Quinnipiac University	Masters of Business Administration	Expected completion May 2013
University of Connecticut	Graduate Business Program through NU	January 2008-July 2009
University of New Haven	Geographic Information Systems (Cert)	September 2006- July 2007
University of Connecticut	B.S. Environmental Science	September 1999- May 2003

Proficiency in Microsoft Word, Excel, Powerpoint, ESRI ARCGIS, Lotus Notes, NU Passport System

Robert J. Russo, P.E

55 Cambridge Drive ◆ Cheshire, CT 06410
Phone: (203) 271-1092 ◆ E-mail: russoar1@cox.net

Summary:

- Professional engineer for 24 years in the electric utility industry including 19 years of long-term and operational transmission planning experience in Connecticut.
- Project Manager of the Northeast Utilities' Transmission Planning Connecticut Studies Group.
- Northeast Utilities' representative on the ISO/TO Study Coordination Group and alternate representative on Northeast Power Coordinating Council's Task Force on System Studies.

Professional Experience and Accomplishments:
Northeast Utilities System, Berlin, CT

March 2006 to Present: Project Manager – Transmission Planning

- Perform 345-kV and 115-kV transmission planning studies for Northeast Utilities' subsidiary; Connecticut Light & Power Company.
- Develop transmission line and substation equipment reinforcement plans to comply with the North American Reliability Corporation's mandatory transmission planning standards.
- Perform and coordinates system impact studies for merchant generating plants connected to the 345-kV and 115-kV transmission systems.
- Technical mentor to junior staff engineers and engineering technicians.
- Member of ISO/TO Study Coordination Group.
- NU alternate representative on Northeast Power Coordinating Council's Task Force on System Studies.

March 2004 to March 2006: Senior Engineer – Transmission Planning

- Perform 345-kV and 115-kV transmission planning studies for Northeast Utilities' subsidiary; Connecticut Light & Power Company.
- Obtain technical and cost allocation approval of transmission planning studies from ISO-NE.
- NU representative on Northeast Power Coordinating Council's Task Force on System Studies

June 2003 to March 2004: Engineering Analysis Team Lead/Senior Engineer – CONVEX

- Oversee day-to-day activities and work plan for the CONVEX Engineering Analysis Group.
- Perform operational planning studies and develop guidelines which ensure secure and reliable operation of the transmission system including development of thermal and voltage transfer limits.
- Provide technical expertise to System Operations Supervisors, Transmission Planning, and other Transmission Business Unit Engineers.
- Responsible for maintenance of CONVEX Energy Management System engineering applications.
- Member of NEPOOL Voltage Task Force.

July 2001 to June 2003: Senior Engineer – CONVEX

- Perform operational planning studies and develop guidelines which ensure secure and reliable operation of the transmission system including development of thermal and voltage transfer limits.
- Maintained ESCA state-estimator solution for use in real-time transmission thermal and voltage analysis.
- Provided technical support to CONVEX System Operations Supervisors, various groups at Northeast Utilities, United Illuminating, and ISO-NE.
- Responsible for maintenance of engineering applications related to CONVEX Energy Management System.
- Member of NEPOOL Voltage Task Force.

Professional Experience and Accomplishments:
The United Illuminating Company, Shelton, CT

February 2001 to July 2001: Principal Engineer – Transmission Services

- Responsible for the completion of long range Transmission plans including cost estimates and alternatives.

- Responsible for all UI Company responses to NEPOOL for NERC/NPCC Reliability Compliance Program.
- Member of NEPOOL Reliability Committee
- Member of NEPOOL Planning Process Subcommittee
- Member of NEPOOL Stability Task Force.
- Member of NEPOOL OASIS Working Group
- Member of NEPOOL Voltage Task Force.

April 1997 to February 2001: Lead System Planning Engineer

- Performed thermal and voltage load flow analysis to promote an efficient and economical operation of the transmission and distribution system while ensuring consistency between Transmission and Distribution Operations.
- Assisted Northeast Utilities and The Connecticut Valley Exchange (CONVEX) in the development of operating guidelines for operation of Connecticut's bulk transmission system.
- Operated and maintained the Open Access Same Time Information System (OASIS).
- Performed Transmission and Distribution Operations Engineers' responsibilities as needed.
- Performed transmission and distribution fault locating using digital fault recorders and Power Quality Nodes.
- Member of NEPOOL Stability Task Force.
- Member of NEPOOL Voltage Task Force.
- Member of NEPOOL Transmission Maintenance and Outage Coordination (Ad Hoc Committee of the NEPOOL Reliability Committee).
- Member of NEPOOL Information Policy Working Group.
- Member of NEPOOL OASIS Working Group

November 1991 to April 1997: Protection, Control & Metering Engineer

- Project manager and lead engineer of several transmission and distribution protective relaying projects. Projects resulted in improved system dependability, security, and reliability.
- Analyzed protective relay performance resulting from transmission system disturbances.
- Maintained short-circuit database used for fault calculations.

July 1988 to November 1991: Transmission Planning Engineer

- Created seasonal, thermal, and voltage operational guidelines for efficient and economical operation of the Southern Connecticut bulk transmission system.
- Provided electric system transmission operating personnel with guidance when planning outages affecting the Southern Connecticut bulk transmission system.

Professional Affiliations

- Registered Professional Engineer by the State of Connecticut since 1995.
- Received Engineer-In-Training Certificate in 1990.
- IEEE Member since 1988.
- IEEE Power Engineering Society Member since 1998.

Education

- B.S., Electrical Engineering, May 1988, Worcester Polytechnic Institute, Worcester, MA
  Major: Electrical Power Systems.
- Completed a two-year series of seminars covering a wide range of Power System engineering topics - seminars taught by Power Technologies, Inc. of Schenectady, NY.

Related Skills

- Extensive working knowledge of PSS/E loadflow and IPLAN software, short-circuit digital transient recorders and their associated software.
- Basic knowledge of SCADA system operation.

Cell (860) 490-5067
Work (860) 665-2705
Work **soderep@nu.com**

Christopher Paul Soderman, P.E.

Education:

Rensselaer Polytechnic Institute (Troy, NY)
Bachelor of Science Degree in Mechanical Engineering

Worcester Polytechnic Institute (Worcester, MA)
Master of Science in Electrical Engineering

University of Hartford (West Hartford, CT)
Master of Business Administration/Master of Engineering (Civil Engineering)
(Curriculum in Progress, 49% Complete)

Relevant Work Experience:

2/2003-Present Northeast Utilities Service Co (NUSCO)
Senior Engineer – Transmission Line & Civil Engineering: Engineering and support for design of new transmission lines and operation and maintenance of existing transmission lines.

Current Engineering Assignments:

- Team Lead – Transmission Line Engineering
- Overhead Conductor Technology Subject Matter Expert
- Overhead Transmission Line Thermal Ratings Subject Matter Expert
- PLS-CADD Subject Matter Expert
- Wind Induced Conductor Motion Subject Matter Expert
- Electric and Magnetic Fields Subject Matter Expert
- Grounding and Lightning design for Transmission Lines Subject Matter Expert
- Electromagnetic Compatibility/Interference Subject Matter Expert
- Natural Wood Pole Structure Subject Matter Expert

Current Project Assignments:

- New England East – West Solution (NEEWS (345-kV)) (2004-Present – T-Line Engineer, CT and MA)
- 1990 Line Rebuild (115 kV) SWCT (2010-Present – Project Engineer)
- Stamford Reliability Cable Project (2012-Present – EMF Analysis)
- Third Taxing District S/S Transmission Interconnection (2012-Present – Project Engineer)

Completed Projects:

- Middletown-Norwalk 345-kV Transmission Line Project (2003-2008 – Transmission Line Engineer (T-Line Engineer), CT)
- Barbour Hill 345-kV Substation Project (2005-2008 – T-Line Engineer, CT)
- 1466 Line Rebuild between Carpenter Lane Junction and North Wallingford S/S (2/2007-8/2007 – Project Engineer, T-Line Engineer)
- Mansfield 69-kV Terminal Uprate (5/2006-9/2006 – Proj Engineer, T-Line Engineer, CT)
- Glenbrook 115-kV Cables Project Siting (2004-05 – Transmission Line Engineering Support, CT)
- University of Connecticut Interconnection 69-kV (2005 – Project Engineer, CT)
- Cleveland Brook Reservoir Shield Wire Project – Vibration Failure (2004-05 – Project Engineer, T-Line Engineer, MA)

2/2002-2/2003 Tech-Aid Corporation for NUSCO
Project Coordinating Engineer (Contract): Coordinated engineering efforts of consultants and internal engineering staff for the Middletown-Norwalk 345-kV transmission Line. Performed route analyses and prepared reports for submittal to the Connecticut Siting Council. Field contact for customer questions regarding project.

5/2001-2/2002 Tech-Aid Corporation for NUSCO
Mechanical Engineer (Contract): Perform energy balance analysis, heat transfer and HVAC System studies. Work routinely with architects, engineers, state and local building officials to educate and demonstrate building practices and designs that improve overall building performance. Perform tests to check for compliance with the 1995 CABO Model Energy Code and US Department of Energy Star™ Homes program. Improve analysis software used in energy analysis. Revamp inspection procedures. Other Special Projects include design work and mock up development for upper management design of the SmartLiving Center with a multimedia presentation.

Professional Registrations:

Licensed Professional Engineer in the State of Connecticut (Lic. # PEN.24928)

Chris Swan - Biography

Chris Swan began his career with Northeast Utilities in Berlin, CT., as an Environmental Scientist in 1976, after receiving an MS in Meteorology from Polytechnic University of NYU. In 1979, he transferred to CL&P's Danbury office as an Energy Consultant. In 1983, he began a series of management assignments at CL&P: first as Manager, Energy Management Services, in Bethel; then in 1990, as Engineering and Marketing Manager in Norwalk; then in 1995, as Regional Sales Manager for CL&P's Western Region; then in 2000, as General Manager in Stamford; and finally, in 2004, in his current assignment as Director – Municipal Relations and Siting, for NU's Transmission Business, based in Norwalk.

Chris is also active in a number of SW CT non-profits, including being on the Boards of Directors of the Greater Norwalk Chamber of Commerce and the Stamford Partnership. He is also active with the Business Council of Fairfield County, serving on their Fairfield County Information Exchange Steering Committee, and he is also a past member of the Boards of Directors of Stamford-based SoundWaters and the Stamford, Westport/Weston and Greater Waterbury Chambers of Commerce. He is a graduate of Staples High School in Westport, CT and received a BA in Economics from Union College, in Schenectady, NY. He is a veteran of the U. S. Air Force, and currently resides in Westport with his wife Carol.

CEAB EXEMPTION

ELIN SWANSON KATZ
CONSUMER COUNSEL

March 1, 2013

Christopher R. Bernard
Manager, Regulatory Affairs
Northeast Utilities Service Company
107 Selden Street
Berlin, CT 06037

RE: Connecticut Energy Advisory Board Vote on CL&P Stamford Reliability Cable Project

Dear Mr. Bernard,

As Chair of the Connecticut Energy Advisory Board (CEAB), I am writing to advise you on the Board's vote concerning the Connecticut Light & Power Company (CL&P) Application to the Connecticut Siting Council (Council) for a Certificate of Environmental Compatibility and Public Need for the Stamford Reliability Cable Project (Project), filed with the Council on January 18, 2013. Pursuant to Connecticut General Statutes section 16a-7c, not later than fifteen days after the filing of an application for a Certificate of Environmental Compatibility and Public Need to the Council, the CEAB "shall issue a request for proposal [RFP] to seek alternative solutions to the need that will be addressed by the proposed facility in such application." The statute further provides that "[n]otwithstanding the provisions of this subsection, the [CEAB], by a vote of two-thirds of the members present and voting, may determine that [an RFP] is unnecessary for a specific application because the process is not likely to result in a reasonable alternative to the proposed facility."

At a CEAB meeting on February 1, 2013, by a vote of two-thirds of the members present and voting, the CEAB determined that an RFP is unnecessary for the Project. The CEAB found that the information CL&P provided regarding why the Project falls within the CEAB RFP exemption criteria to be satisfactory. The information that CL&P provided included the following: the Project is small, only 1.5 miles; the Project has a short lead time; the Project is urgently needed; and the Project is energy efficient and environmentally benign.

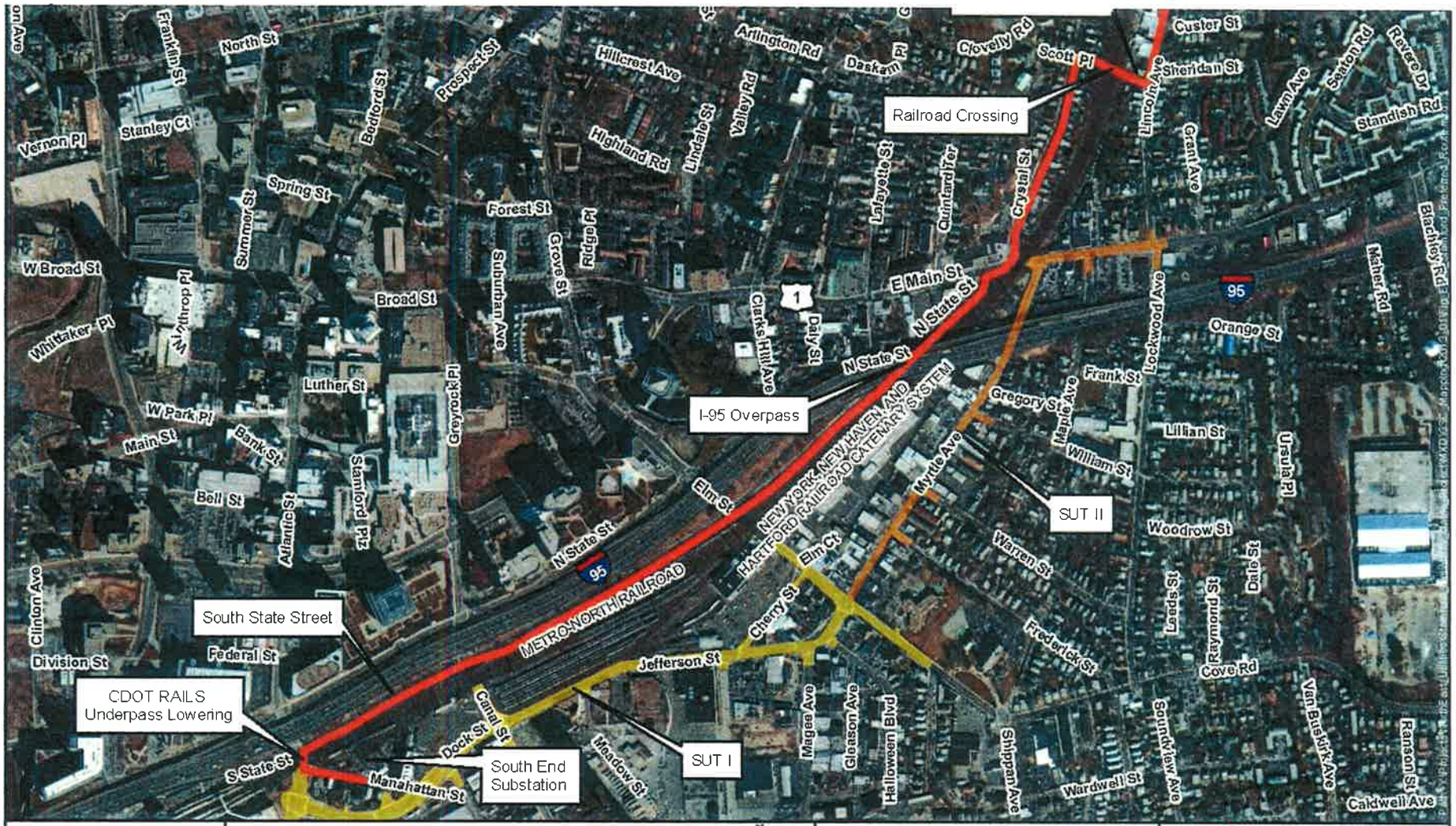
Please let me know if you have any questions or concerns.

Regards,

Elin Swanson Katz

Cc: Robert Stein, Chairman, Connecticut Siting Council
CEAB members

ATTACHMENT 1



Map Location

Legend

PREFERRED ROUTE

Stamford Urban Transitway (SUT) Road Improvements

SUT Phase I (Construction Complete)

SUT Phase II (Construction to Commence Q1 2013)

1:7,200 1" = 600'

0 600 1,200 Feet

Data Souce ESRI Bing Imagery
AECOM Survey May 2012

N

Stamford Reliability Cable Project

Glenbrook to South End Substation
Survey Aerial Map

PREFERRED ROUTE

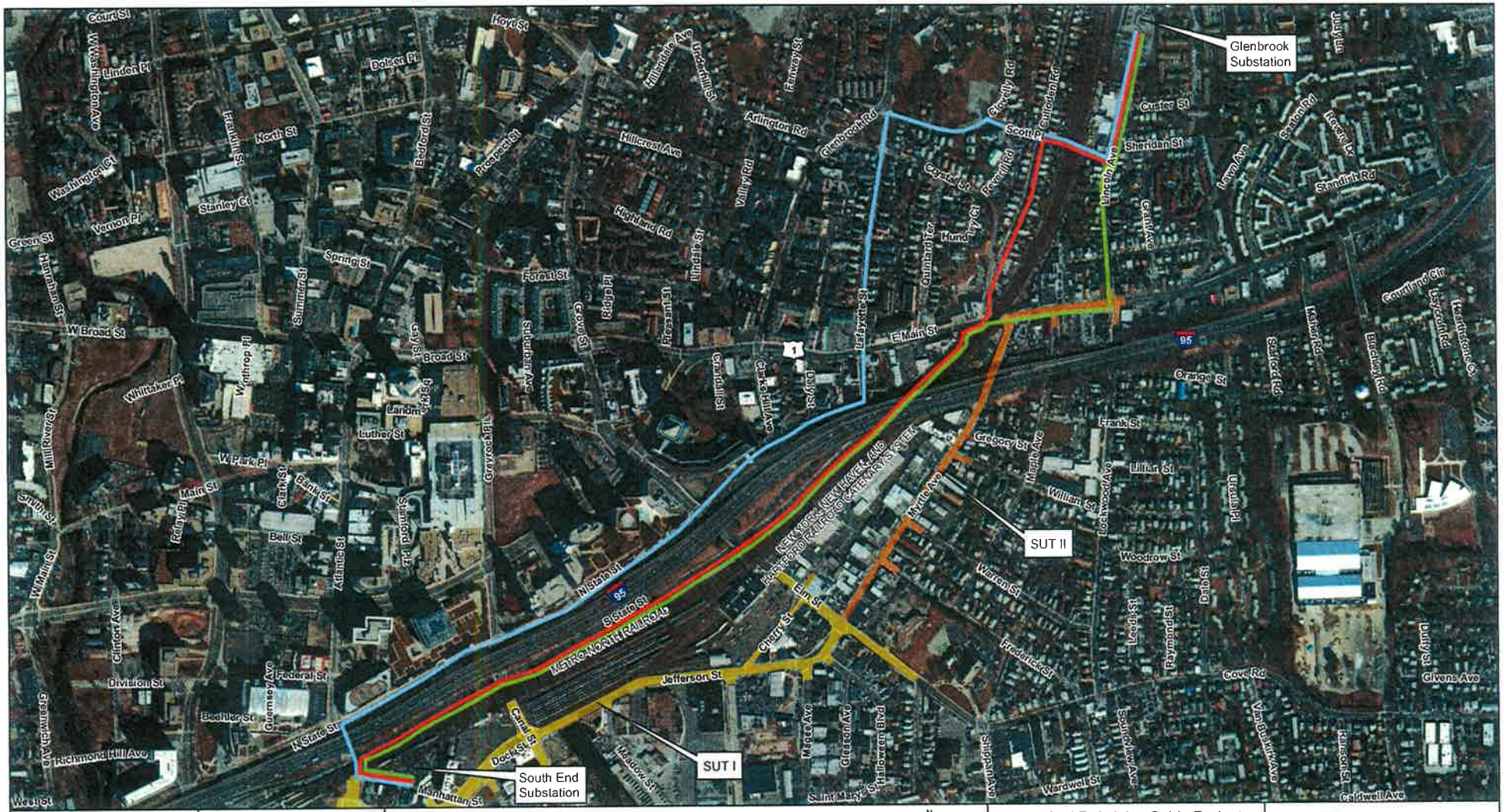
Connecticut Light & Power
A Northeast Utilities Company

AECOM

Figure ES-1

Date January 10 2013

ATTACHMENT 2



Stamford Reliability Cable Project
115-kV Route Options
Glenbrook to South End Substation
Survey Aerial Map

ALL ROUTES MAP

Connecticut Light & Power
A Northeast Utilities Company

AECOM

Figure 3

Date: January 10 2013

ATTACHMENT 3

PUBLIC NOTICE

Applicant: Connecticut Light & Power

Type of Facility: Electric Transmission Line

Public Hearing Date:

Thursday, March 28, 2013

3:00 pm & 7:00 pm

NEON Stamford Gymnasium

34 Woodland Avenue

Stamford, CT

Applicable Documents for the Stamford Reliability Cable Project are available at: http://www.ct.gov/csc under Pending Proceedings - Docket 435

or

the Ferguson Library at 96 Broad Street, Stamford, CT

Connecticut Siting Council Information:

(860) 827-2935 or http://www.ct.gov/csc or siting.council@ct.gov

10 Franklin Square, New Britain, Connecticut 06051