# 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@ct.gov Web Site: www.ct.gov/csc

Hearing Program
Docket No. 461A
Tuesday, September 5, 2017
11:00 a.m.
Connecticut Siting Council, Hearing Room One
10 Franklin Square, New Britain, Connecticut

- I. Opening by Council
  - A. Statement read by Chair.
  - B. Comments by Public Official(s) (if any)
  - C. Motions
  - D. Administrative Notice taken by Council

#### **FEDERAL**

- 1. NATIONAL INSTITUTE OF ENVIRONMENTAL HEALTH SCIENCES, NATIONAL INSTITUTES OF HEALTH, EMF, Electric and Magnetic Fields Associated with the Use of Electric Power, June 2002, available at <a href="http://www.niehs.nih.gov/health/assets/docs-p-z/results-of-emf-research-emf-questions-answers-booklet.pdf">http://www.niehs.nih.gov/health/assets/docs-p-z/results-of-emf-research-emf-questions-answers-booklet.pdf</a>
- 2. NATIONAL RESEARCH COUNCIL, Research on Power-Frequency Fields Completed Under the Energy Policy Act of 1992, National Academy of Sciences, 1999, available at <a href="http://books.nap.edu/openbook.php?isbn=0309065437">http://books.nap.edu/openbook.php?isbn=0309065437</a>
- 3. Proclamation No. 8460 Critical Infrastructure Protection Month, 2009, 74 Fed. Reg. 234, December 8, 2009, *available at* http://www.presidency.ucsb.edu/ws/index.php?pid=86954
- 4. Presidential Executive Order No. 13636, Improving Critical Infrastructure Cybersecurity, 78 FED. REG. 11739, February 19, 2013, *available at* <a href="http://www.archives.gov/federal-register/executive-orders/2013.html">http://www.archives.gov/federal-register/executive-orders/2013.html</a>
- 5. UNITED STATES DEPARTMENT OF THE INTERIOR, NATIONAL PARK SERVICE, National Register of Historic Places, September 2014, available at <a href="http://www.nps.gov/history/nr/research/index.htm">http://www.nps.gov/history/nr/research/index.htm</a>
- 6. FEDERAL AVIATION ADMINISTRATION, UNITED STATES DEPARTMENT OF TRANSPORTATION, OBSTRUCTION MARKING AND LIGHTING, ADVISORY CIRCULAR AC70/7460-1L (December 4, 2015), available at <a href="https://www.faa.gov/documentLibrary/media/Advisory-Circular/AC-70-7460-1L">https://www.faa.gov/documentLibrary/media/Advisory-Circular/AC-70-7460-1L</a> .pdf
- 7. UNITED STATES DEPARTMENT OF ENERGY, FEDERAL ENERGY REGULATORY COMMISSION AND THE NORTH AMERICAN ELECTRIC AND RELIABILITY CORPORATION, Report on Transmission Facility Outages During the Northeast Snowstorm of October 29-30, 2011 Causes and Recommendations, May 31, 2012, available at <a href="http://ferc.gov/legal/staff-reports/05-31-2012-ne-outage-report.pdf">http://ferc.gov/legal/staff-reports/05-31-2012-ne-outage-report.pdf</a>
- 8. NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION, Critical Infrastructure Protection, CIP-014-1, Physical Security Standards, May 1, 2014, available at <a href="http://www.nerc.com/pa/Stand/Reliability%20Standards/CIP-014-1.pdf">http://www.nerc.com/pa/Stand/Reliability%20Standards/CIP-014-1.pdf</a>

- 9. UNITED STATES DEPARTMENT OF ENERGY, FEDERAL ENERGY REGULATORY COMMISSION, Guidelines for the Protection of Natural, Historic, Scenic and Recreational Values in the Design and Location of Rights-of-Way and Transmission Facilities, November 27, 1970.
- 10. UNITED STATES QUADRENNIAL ENERGY REVIEW TASK FORCE, Quadrennial Energy Review: Energy Transmission, Storage, and Distribution Infrastructure, April 2015, available at <a href="http://energy.gov/epsa/downloads/quadrennial-energy-review-full-report">http://energy.gov/epsa/downloads/quadrennial-energy-review-full-report</a>
- 11. <u>UNITED STATES QUADRENNIAL ENERGY REVIEW TASK FORCE, Quadrennial Energy Review Second Installment:</u>

  Transforming the Nation's Electricity System, January 2017, available at

  https://energy.gov/epsa/downloads/quadrennial-energy-review-second-installment
- 12. U.S. FISH AND WILDLIFE SERVICE, Final 4(d) Rule for the Northern Long-eared Bat, January 14, 2016, *available at* https://www.fws.gov/Midwest/endangered/mammals/nleb/pdf/FRnlebFinal4dRule14Jan2016.pdf
- 13. UNITED STATES ENERGY INFORMATION ADMINISTRATION, Annual Energy Outlook 2017, January 5, 2017, available at http://www.eia.gov/forecasts/aeo/

#### **REGIONAL**

- 14. ISO-NEW ENGLAND, INC., Power Generation and Fuel Diversity in New England, August 25, 2005, available at <a href="http://www.iso-ne.com/pubs/whtpprs/iso-ne-paper.pdf">http://www.iso-ne.com/pubs/whtpprs/iso-ne-paper.pdf</a>
- 15. ISO-NEW ENGLAND, INC., *Electricity Costs White Paper*, June 1, 2006, *available at http://www.iso-ne.com/pubs/whtpprs/elec costs wht ppr.pdf*
- 16. ISO NEW ENGLAND, 2014 Regional System Plan, November 6, 2014, available at <a href="http://www.iso-ne.com/system-planning/system-plans-studies/rsp">http://www.iso-ne.com/system-planning/system-plans-studies/rsp</a>
- 17. ISO-NEW ENGLAND, INC., 2015 Regional System Plan, November 5, 2015, <a href="http://www.iso-ne.com/system-planning/system-plans-studies/rsp">http://www.iso-ne.com/system-planning/system-plans-studies/rsp</a>
- 18. ISO-NEW ENGLAND, INC., 2016-2025 Forecast Report of Capacity, Energy, Loads & Transmission (CELT), May 2, 2016, available at https://www.iso-ne.com/system-planning/system-plans-studies/celt
- 19. ISO-NEW ENGLAND, INC., 2017-2026 Forecast Report of Capacity, Energy, Loads & Transmission (CELT), May 1, 2017, available at https://www.iso-ne.com/system-planning/system-plans-studies/celt
- 20. ISO-NEW ENGLAND, INC., 2016 Regional Electricity Outlook, January 2016, available at <a href="https://www.iso-ne.com/static-assets/documents/2016/03/2016">https://www.iso-ne.com/static-assets/documents/2016/03/2016</a> reo.pdf
- 21. ISO-NEW ENGLAND, INC., 2017 Regional Electricity Outlook, January 2017, available at <a href="https://www.iso-ne.com/static-assets/documents/2017/02/2017">https://www.iso-ne.com/static-assets/documents/2017/02/2017</a> reo.pdf
- 22. ISO-NEW ENGLAND, INC., ISO-NE, Inc. *Transmission, Markets and Services Tariff, March 1, 2017, available at* <a href="https://www.iso-ne.com/participate/rules-procedures/tariff">https://www.iso-ne.com/participate/rules-procedures/tariff</a>
- 23. ISO-NEW ENGLAND, INC.. ISO-NE Planning Procedure No. 4, Procedure for Pool-Supported PTF Cost Review, May 6, 2016, *available at* <a href="https://www.iso-ne.com/static-assets/documents/rules-proceds/isone-plan/pp04-0/pp4-0.pdf">https://www.iso-ne.com/static-assets/documents/rules-proceds/isone-plan/pp04-0/pp4-0.pdf</a>

- 24. ISO-NEW ENGLAND, INC., 2017 State of the Grid: 2017, Presentation by Gordon van Welie, January 30, 2017, available at <a href="https://www.iso-ne.com/static-assets/documents/2017/01/20170130">https://www.iso-ne.com/static-assets/documents/2017/01/20170130</a> stateofgrid2017 presentation pr.pdf
- 25. New England Energy Landscape Update, Prepared for the New England Coalition for Affordable Energy, Daymark Energy Advisors, October 3, 2016, available at <a href="https://media.gractions.com/5CC7D7975DFE1335100A9E9B056042840005CCF0/3d7036a2-dba3-4773-87a7-5697a425e1fa.pdf">https://media.gractions.com/5CC7D7975DFE1335100A9E9B056042840005CCF0/3d7036a2-dba3-4773-87a7-5697a425e1fa.pdf</a>
- 26. The Economic Impacts of Failing to Build Energy Infrastructure in New England, Prepared for the New England Coalition for Affordable Energy, La Capra Associates, Inc. and Economic Development Research Group, August 25, 2015, available at <a href="http://media.gractions.com/5CC7D7975DFE1335100A9E9B056042840005CCF0/25e72b85-c007-4b98-a851-8b31563c9559.pdf">http://media.gractions.com/5CC7D7975DFE1335100A9E9B056042840005CCF0/25e72b85-c007-4b98-a851-8b31563c9559.pdf</a>

#### **STATE**

# Connecticut Siting Council

- 27. CONNECTICUT SITING COUNCIL, Electric and Magnetic Field Best Management Practices for the Construction of Electric Transmission Lines in Connecticut, December 14, 2007, revised February 20, 2014, available at <a href="http://www.ct.gov/csc/emf-bmp">http://www.ct.gov/csc/emf-bmp</a>
- 28. CONNECTICUT SITING COUNCIL, 2014/2015 Forecast of Electric Loads and Resources, December 10, 2015, available at <a href="http://www.ct.gov/csc/lib/csc/pendingproceeds/forecast">http://www.ct.gov/csc/lib/csc/pendingproceeds/forecast</a> 2014 2015/f-2015 finalreport.pdf
- 29. CONNECTICUT SITING COUNCIL, White Paper on the Security of Siting Energy Facilities, October 8, 2009, available at <a href="http://www.ct.gov/csc/lib/csc/docket-346/whiteppr-final.pdf">http://www.ct.gov/csc/lib/csc/docket-346/whiteppr-final.pdf</a>
- 30. CONNECTICUT SITING COUNCIL, *Investigation into the Life Cycle Costs of Electric Transmission Lines*, November 15, 2012, *available at* http://www.ct.gov/csc/lib/csc/lifecycle2011/life cycle final report.pdf
- 31. Letter from Robert Carberry, Project Manager, NEEWS Siting and Permitting, Connecticut Light & Power Company to Melanie Bachman, Acting Executive Director, Connecticut Siting Council regarding underground reconstruction of distribution line segments at transmission line road crossings, dated May 17, 2013.
- 32. CONNECTICUT SITING COUNCIL, PETITION NO. 36 The Connecticut Light and Power Company declaratory ruling for construction of a double circuit 115-kV line at the Mianus River, in Greenwich. Record.
- 33. CONNECTICUT SITING COUNCIL, PETITION NO. 237 The Connecticut Light and Power Company petition that General Statute 16-50z does not apply to electric substations. Record.
- 34. CONNECTICUT SITING COUNCIL, PETITION NO. 268 The Connecticut Light and Power Company declaratory ruling for a proposed addition to the Tomac Substation and an associated modification to a 115-kV transmission line, in Greenwich. Record.
- 35. CONNECTICUT SITING COUNCIL, PETITION NO. 488 Connecticut Light and Power Company declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for modifications to an existing electric substation facility (Cos Cob Substation) located off Sound Shore Drive, Greenwich, Connecticut. Record

- 36. CONNECTICUT SITING COUNCIL, PETITION NO. 692 Connecticut Light & Power Company declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the proposed installation of a circuit breaker and associated equipment at Cos Cob Metro-North Railroad 35K Substation in Greenwich, Connecticut. Record.
- 37. CONNECTICUT SITING COUNCIL, PETITION NO. 812 Connecticut Jet Power LLC declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the proposed construction, maintenance, and operation of two 20 MW peaking units located at the Cos Cob facility, Sound Shore Drive, Greenwich, Connecticut. Record.
- 38. CONNECTICUT SITING COUNCIL, PETITION NO. 950 The Connecticut Light and Power Company (CL&P) declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the proposed modifications to the existing CL&P Cos Cob substation, located at Sound Shore Drive, Greenwich, Connecticut. Record.
- 39. CONNECTICUT SITING COUNCIL, DOCKET NO. 208 Cross-Sound Cable Company, LLC Certificate of Environmental Compatibility and Public Need for the construction, operation, and maintenance of a high-voltage direct current (HVDC) submarine electric transmission and fiber optic cable system from One Waterfront Street, New Haven, Connecticut to Brookhaven, New York. Record.
- 40. CONNECTICUT SITING COUNCIL, DOCKET NO. 217 Northeast Utilities Service Company application for a Certificate of Environmental Compatibility and Public Need for the construction of a 345-kV electric transmission line and reconstruction of an existing 115-kV electric transmission line between Connecticut Light and Power Company's Plumtree Substation in Bethel, through the Towns of Redding, Weston, and Wilton, and to Norwalk Substation in Norwalk, Connecticut. Record.
- 41. CONNECTICUT SITING COUNCIL, DOCKET NO. 304 The Connecticut Light and Power Company submission of a Statement of Intent to Acquire Property as the site for a possible future CL&P 115-kV substation located within an industrial park between Jacks Hill Road and Christian Street and a transmission line easement adjacent to the existing right-of way for possible future transmission line use located near the Waterbury Oxford Airport, Oxford, Connecticut. Record.
- 42. CONNECTICUT SITING COUNCIL, DOCKET NO. 370MR The Connecticut Light & Power Company Certificate of Environmental Compatibility and Public Need for the Manchester Substation to Meekville Junction Circuit Separation Project in Manchester, Connecticut. Record.
- 43. CONNECTICUT SITING COUNCIL, DOCKET NO. 461 Eversource Energy application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation of a 115-kilovolt (kV) bulk substation located at 290 Railroad Avenue, Greenwich, Connecticut, and two 115-kV underground transmission circuits extending approximately 2.3 miles between the proposed substation and the existing Cos Cob Substation, Greenwich, Connecticut, and related substation improvements. Record.
- 44. CONNECTICUT SITING COUNCIL ENERGY/TELECOMMUNICATIONS REGULAR MEETING MINUTES, May 25, 2017.

# Department of Energy and Environmental Protection

45. STATE OF CONNECTICUT, DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION, CONNECTICUT COUNCIL ON SOIL AND WATER CONSERVATION, Connecticut Guidelines for Soil Erosion and Sediment Control, DEP Bulletin 34, May 2002, last revised September 2007, available at <a href="http://www.ct.gov/dep/cwp/view.asp?a=2720&q=325660&depNay">http://www.ct.gov/dep/cwp/view.asp?a=2720&q=325660&depNay</a> GID=1654

- 46. State of Connecticut Department of Energy and Environmental Protection, *The Connecticut Stormwater Quality Manual*, 2004, *and appendices, available at*<a href="http://www.ct.gov/DEP/cwp/view.asp?a=2721&q=325704&depNav\_GID=1654">http://www.ct.gov/DEP/cwp/view.asp?a=2721&q=325704&depNav\_GID=1654</a>
- 47. STATE OF CONNECTICUT, DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION, Amphibians and Reptiles in Connecticut, DEP Bulletin 32, Michael W. Klemens, 2000, available at <a href="http://ctdepstore.com/Amphibians-and-Reptiles-in-Connecticut-101.htm">http://ctdepstore.com/Amphibians-and-Reptiles-in-Connecticut-101.htm</a>
- 48. STATE OF CONNECTICUT, DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION, BUREAU OF WATER MANAGEMENT, PLANNING AND STANDARDS DIVISION, *Water Quality Standards*, Surface Water Quality Standards Effective February 25, 2011 and Ground Water Quality Standards Effective April 12, 1996, *available at* http://www.ct.gov/dep/lib/dep/water/water quality standards/wqs.pdf
- 49. STATE OF CONNECTICUT, DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION, Connecticut Air Quality Standards, Effective April 15, 2014, Regulations of Connecticut State Agencies §§ 22a-174-24, et seq., available at http://www.ct.gov/deep/lib/deep/air/regulations/mainregs/sec24.pdf
- 50. STATE OF CONNECTICUT, DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION, *Connecticut Noise Control Regulations*, Effective June 15, 1978, Regulations of Connecticut State Agencies §§22a-69-1, et seq., *available at* <a href="http://www.ct.gov/deep/lib/deep/regulations/22a/22a-69-1through7.pdf">http://www.ct.gov/deep/lib/deep/regulations/22a/22a-69-1through7.pdf</a>
- 51. STATE OF CONNECTICUT, DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION, 2014 Integrated Resource Plan for Connecticut, March 17, 2015, available at <a href="http://www.dpuc.state.ct.us/DEEPEnergy.nsf/c6c6d525f7cdd1168525797d0047c5bf/8e95d81c37c7237085257e0b0047770b2?OpenDocument">http://www.dpuc.state.ct.us/DEEPEnergy.nsf/c6c6d525f7cdd1168525797d0047c5bf/8e95d81c37c7237085257e0b004770b2?OpenDocument</a>
- 52. STATE OF CONNECTICUT, DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION, 2013 Comprehensive Energy Strategy for Connecticut, February 19, 2013, available at <a href="http://www.ct.gov/deep/lib/deep/energy/cep/2013">http://www.ct.gov/deep/lib/deep/energy/cep/2013</a> ces final.pdf
- 53. STATE OF CONNECTICUT, DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION, BUREAU OF NATURAL RESOURCES, Connecticut's Endangered, Threatened and Special Concern Species 2015, August 2015, available at <a href="http://www.ct.gov/deep/lib/deep/wildlife/pdf">http://www.ct.gov/deep/lib/deep/wildlife/pdf</a> files/nongame/ETS15.pdf

# Department of Public Health

54. STATE OF CONNECTICUT, DEPARTMENT OF PUBLIC HEALTH, Electric and Magnetic Fields (EMF): Health Concerns Fact Sheet, April 2008, available at <a href="http://www.ct.gov/dph/lib/dph/environmental">http://www.ct.gov/dph/lib/dph/environmental</a> health/eoha/pdf/emf fact sheet - 2008.pdf

#### **Department of Transportation**

- 55. STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION, *ConnDOT Drainage Manual*, 2000, last revised December 2003, *available at* http://www.ct.gov/dot/cwp/view.asp?a=3200&q=260116
- 56. STATE OF CONNECTICUT, DEPARTMENT OF TRANSPORTATION, *Utility Accommodation Manual*, February 2009, *available at* <a href="http://www.ct.gov/dot/lib/dot/documents/dutilities/ACCOMODATION.pdf">http://www.ct.gov/dot/lib/dot/documents/dutilities/ACCOMODATION.pdf</a>
- 57. STATE OF CONNECTICUT, DEPARTMENT OF TRANSPORTATION, BUREAU OF ENGINEERING AND HIGHWAY OPERATIONS, *Public Service Facility Policy and Procedures for Highways in Connecticut*, November 2008, available at <a href="http://www.ct.gov/dot/lib/dot/documents/dutilities/UtilityPolicyProcedures.pdf">http://www.ct.gov/dot/lib/dot/documents/dutilities/UtilityPolicyProcedures.pdf</a>

### Other State Agencies

- 58. PUBLIC UTILITIES REGULATORY AUTHORITY, Cybersecurity and Connecticut's Public Utilities, April 14, 2014, available at <a href="http://www.ct.gov/pura/lib/pura/electric/cyber-report-041414.pdf">http://www.ct.gov/pura/lib/pura/electric/cyber-report-041414.pdf</a>
- 59. PUBLIC UTILITIES REGULATORY AUTHORITY, Connecticut Public Utilities Cybersecurity Action Plan, April 6, 2016, available at <a href="http://www.ct.gov/pura/lib/pura/electric/cyber-report\_April 6">http://www.ct.gov/pura/lib/pura/electric/cyber-report\_April 6</a> 2016.pdf
- 60. STATE OF CONNECTICUT, DEPARTMENT OF ECONOMIC AND COMMUNITY DEVELOPMENT, STATE HISTORIC PRESERVATION OFFICE, *Investment in Connecticut: State Historic Preservation Plan 2011-2016*, July 2011, available at http://www.ct.gov/cct/lib/cct/state historic preservation plan ic.pdf
- 61. STATE OF CONNECTICUT, OFFICE OF POLICY AND MANAGEMENT, Conservation and Development Policies Plan for Connecticut 2013-2018, June 5, 2013, available at <a href="http://www.ct.gov/opm/lib/opm/igp/org/cdupdate/2013-2018">http://www.ct.gov/opm/lib/opm/igp/org/cdupdate/2013-2018</a> cd plan.pdf
- 62. Final Report of the Two Storm Panel, January 9, 2012, *available at* <a href="http://www.governor.ct.gov/malloy/lib/malloy/two">http://www.governor.ct.gov/malloy/lib/malloy/two</a> storm panel final report.pdf
- 63. STATE OF CONNECTICUT, DEPARTMENT OF EMERGENCY SERVICES AND PUBLIC PROTECTION, DIVISION OF EMERGENCY MANAGEMENT AND HOMELAND SECURITY, State of Connecticut State Response Framework, Version 2.0, August 2011, available at <a href="http://www.ct.gov/demhs/lib/demhs/ct\_srf\_aug\_2011.pdf">http://www.ct.gov/demhs/lib/demhs/ct\_srf\_aug\_2011.pdf</a>
- 64. STATE OF CONNECTICUT, DEPARTMENT OF EMERGENCY SERVICES AND PUBLIC PROTECTION, DIVISION OF EMERGENCY MANAGEMENT AND HOMELAND SECURITY, State of Connecticut State Response Framework, Draft Connecticut Emergency Support Function 12, All Hazards Energy and Utilities Annex, July 2012, available at <a href="http://www.ct.gov/demhs/lib/demhs/eppi/esf">http://www.ct.gov/demhs/lib/demhs/eppi/esf</a> 12 all-<a href="hazards">hazards</a> energy and utilities annex final draft july 2012.pdf
- 65. GOVERNOR'S STEERING COMMITTEE ON CLIMATE CHANGE, ADAPTATION SUBCOMMITTEE, Connecticut Climate Change Preparedness Plan, Adaptation Strategies for Agriculture, Infrastructure, Natural Resources and Public Health Climate Change Vulnerabilities, 2011, available at <a href="http://www.ct.gov/deep/lib/deep/climatechange/connecticut\_climate\_preparedness\_plan\_2011.pdf">http://www.ct.gov/deep/lib/deep/climatechange/connecticut\_climate\_preparedness\_plan\_2011.pdf</a>
- 66. STATE OF CONNECTICUT, STATE VEGETATION MANAGEMENT TASK FORCE, Final Report Issued to the Connecticut Department of Energy and Environmental Protection, August 28, 2012, available at <a href="http://www.ct.gov/deep/lib/deep/forestry/vmtf/final report/symtf-final report.pdf">http://www.ct.gov/deep/lib/deep/forestry/vmtf/final report/symtf-final report.pdf</a>

# **TECHNICAL**

- 67. INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, IEEE Standard Procedures for Measurement of Power Frequency Electric and Magnetic Fields From AC Power Lines, IEEE Std 644-1994, Reaffirmed 2008, available for purchase at <a href="http://standards.ieee.org/findstds/standard/644-1994.html">http://standards.ieee.org/findstds/standard/644-1994.html</a>
- 68. INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, IEEE Guide for the Design, Construction, and Operation of Safe and Reliable Substations for Community Acceptance and Environmental Compatibility, IEEE Std 1127-2013, available for purchase at http://standards.ieee.org/findstds/standard/1127-2013.html

- 69. INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, 2015 IEEE Guide for Animal Deterrents for Electric Power Supply Substations, June 9, 2015, available for purchase at <a href="https://standards.ieee.org/findstds/standard/1264-2015.html">https://standards.ieee.org/findstds/standard/1264-2015.html</a>
- 70. INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, *National Electrical Safety Code*, American National Standards Institute, Standard C2-2017, October 18, 2016.
- 71. EXPONENT, INC., EMF and Health: Review and Update of the Scientific Research, January 28, 2009, available at <a href="http://transmission.bchydro.com/NR/rdonlyres/DEF09171-908A-48DF-A9DA-F28676D239FD/0/Exponent2009EMFUpdate0209.pdf">http://transmission.bchydro.com/NR/rdonlyres/DEF09171-908A-48DF-A9DA-F28676D239FD/0/Exponent2009EMFUpdate0209.pdf</a>
- 72. EXPONENT, INC., Current Status of Research on Extremely Low Frequency Electric and Magnetic Fields and Health:
  Interstate Reliability Project, January 10, 2011, available at
  <a href="http://www.ct.gov/csc/lib/csc/pendingproceeds/docket\_424/424">http://www.ct.gov/csc/lib/csc/pendingproceeds/docket\_424/424</a> application/v1interstate csc application
  <a href="http://www.ct.gov/csc/lib/csc/pendingproceeds/docket\_424/424">v1.pdf</a> (Appendix D EMF Health Report)

#### **ENVIRONMENTAL**

- 73. RICHARD M. DEGRAAF & DEBORAH D. RUDIS, New England Wildlife: Habitat, Natural History, and Distribution, University of Massachusetts Press, 1983, available at <a href="http://www.treesearch.fs.fed.us/pubs/4148">http://www.treesearch.fs.fed.us/pubs/4148</a>
- 74. ARAM J.K. CALHOUN & MICHAEL W. KLEMENS, Best Development Practices: Conserving Pool-Breeding Amphibians in Residential and Commercial Developments in the Northeastern United States, MCA Technical Paper No. 5, Metropolitan Conservation Alliance 2002, available at <a href="http://www.umaine.edu/vernalpools/PDFs/Best%20Development%20Practices%20%20-620%20Conserving%20Pool-breeding%20Amph.pdf">http://www.umaine.edu/vernalpools/PDFs/Best%20Development%20Practices%20%20-620%20Conserving%20Pool-breeding%20Amph.pdf</a>
- 75. ARAM J.K. CALHOUN, ET. AL., Conserving pool-breeding amphibians in human-dominated landscapes through local implementation of Best Development Practices, Wetlands Ecology and Management, July 9, 2004 at 291, available at <a href="http://www.environmental-expert.com/Files/0/articles/9373/Conservingpool-breeding.pdf">http://www.environmental-expert.com/Files/0/articles/9373/Conservingpool-breeding.pdf</a>
- 76. AVIAN POWER LINE INTERACTION COMMITTEE, Suggested Practices for Avian Protection on Power Lines, 2006, available at http://www.aplic.org/uploads/files/2643/SuggestedPractices2006(LR-2).pdf
- 77. CHRISTOPHER BARTON AND KAREN KINKEAD, *Do Erosion Control and Snakes Mesh?*, Journal of Science and Water Conservation 2005, Volume 60, Number 2, *available at* http://www.treesearch.fs.fed.us/pubs/21050

# **MAPS**

- 78. STATE OF CONNECTICUT, DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION, NATURAL RESOURCES DIVISION, *Atlas of Connecticut Topographic Maps, DEP Bulletin 17*, 1992, *available at* http://www.ct.gov/deep/cwp/view.asp?a=2701&q=323450&deepNav\_GID=1636
- 79. STATE OF CONNECTICUT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION, *Natural Diversity Database Map for the Towns of Greenwich*, last updated December 2014, *available at* <a href="http://www.depdata.ct.gov/naturalresources/endangeredspecies/nddbpdfs.asp">http://www.depdata.ct.gov/naturalresources/endangeredspecies/nddbpdfs.asp</a>
- 80. CONNECTICUT FOREST & PARK ASSOCIATION, *Connecticut Walk Book West*, Ann T. Colson, ed., 19th ed. 2006, *available at* http://www.ctwoodlands.org/node/17
- 81. National Audubon Society, *Connecticut Important Bird Areas*, last updated 2015, *available at* <a href="http://netapp.audubon.org/iba/state/US-CT">http://netapp.audubon.org/iba/state/US-CT</a>

- 82. Mail-A-Map Street Map, Town of Greenwich, available at <a href="http://mailamap.com/street-maps">http://mailamap.com/street-maps</a>
- 83. UNITED STATES GEOLOGICAL SURVEY, Connecticut Topographic Map Collection, available at <a href="http://magic.lib.uconn.edu/topographic\_maps.html">http://magic.lib.uconn.edu/topographic\_maps.html</a>
- 84. STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION, Connecticut Official State Tourism Map
- E. State Agency comments
- F. Municipal comments

II.	Appearance	by Ar	plicant

Applicant: Eversource Energy

Representative: Anthony Fitzgerald, Esq.
Carmody Torrance Sandak & Hennessey LLP

#### A. Administrative Notice.

- 1. **DOCKET NO. 474** The Connecticut Light & Power Company d/b/a Eversource Energy application for a Certificate of Environmental Compatibility and Public Need for the Greater Hartford-Central Connecticut Reliability Project that traverses the municipalities of Hartford, West Hartford, and Newington, which consists of (a) construction, maintenance and operation of a new 115-kilovolt (kV) electric transmission line within existing Eversource, Amtrak and public road rights-of-way and associated facilities extending overhead approximately 2.4 miles and underground approximately 1.3 miles between Eversource's existing Newington Substation in the Town of Newington and existing Southwest Hartford Substation in the City of Hartford; (b) modifications to a .01 mile section within existing Eversource right-of-way of the existing overhead 115-kV electric transmission line connection to the Newington Substation (Newington Tap); and (c) related modifications to Newington Substation and Southwest Hartford Substation. RECORD.
- 2. Annual Report, July 1, 2015 June 30, 2016, Town of Greenwich, Connecticut, available at <a href="https://www.greenwichct.org/upload/medialibrary/5f9/Annual Report 2015-2016 Final.pdf">www.greenwichct.org/upload/medialibrary/5f9/Annual Report 2015-2016 Final.pdf</a>

#### B. Exhibits for Identification.

- 1. Motion to Reopen based on changed conditions pursuant to Connecticut General Statutes §4-181a(b) on Eversource Energy application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation of a 115-kilovolt (kV) bulk substation located at 290 Railroad Avenue, Greenwich, Connecticut, and two 115-kV transmission circuits extending approximately 2.3 miles between the proposed substation and the existing Cos Cob Substation, Greenwich, Connecticut, and related substation improvements, dated May 5, 2017.
- 2. Eversource Energy's Responses to CSC Set One Interrogatories, dated June 30, 2017
- 3. Eversource Energy's Sign Location Letter with attachments, dated July 6, 2017
- 4. Eversource Energy's Supplemental Direct Testimony of Kenneth Bowes with attachments, dated July 10, 2017
- 5. Eversource Energy's Correspondence Regarding Withdrawal of the Proposed Modified Project along the Metro-North Railroad Right of Way, dated July 10, 2017
- 6. Eversource Energy's Greenwich Substation and Line Project CSC Field Review Meeting Agenda and Driving Route Maps, dated July 13, 2017
- 7. Eversource Energy's Greenwich Substation and Line Project Public Comment Hearing Presentation, dated July 13, 2017
- 8. Eversource Energy's Second Supplemental Direct Testimony of Kenneth Bowes, dated July 17, 2017

- 9. Eversource Energy's Responses to Parker Stacy Set One and the Town of Greenwich Set One Interrogatories, dated July 18, 2017
- 10. Eversource Energy's Substitute pages, dated August 4, 2017;
  - a. Pages D-4 and D-5 of Ex. B to Motion to the Reopen;
  - b. Page 4 of Eversource Energy's initial pre-filed testimony (revised Figure 1); and
  - c. Page 10 of Eversource Energy's initial pre-filed testimony (revised Figure 5)
- 11. Eversource Energy's Revised Response to Council Interrogatory 61, dated August 11, 2017
- 12. Eversource Energy's Responses to CSC Set Two and Three Interrogatories, dated August 22, 2017
- 13. Eversource Energy's Responses to Parker Stacy Set Two Interrogatories, dated August 22, 2017
- 14. Eversource Energy's Responses to Town of Greenwich Set Two Interrogatories, dated August 22, 2017
- 15. Eversource Energy's Supplemental Response to Town of Greenwich Set Two Interrogatories No. 77, dated September 1, 2017

#### C. Swear Witnesses

- 1. Kenneth B. Bowes, Vice President-Engineering, Eversource Energy
- 2. Farah S. Omokaro, Manager of Project Solutions, Eversource Energy
- 3. Jason Cabral, PE, Lead Project Manager, Burns & McDonnell
- 4. Michael Libertine, LEP, Vice President, Director of Siting and Permitting, All-Points Technology Corporation, P.C.
- 5. Christopher Paul Soderman, P.E., Lead Engineer Transmission Line & Civil Engineering, Eversource Energy
- 6. Ronald J. Araujo, P.E., Manager, Energy Efficiency, Eversource Energy
- 7. John C. Case, Manager-Transmission Line, Eversource Energy
- D. Full Exhibits Verification of exhibits by witnesses and admission by the Council.
- E. Cross Examination.
  - 1. Council
  - 2. Office of Consumer Counsel
  - 3. Parker Stacy
  - 4. Field Point Estate Townhouses
  - 5. Christine Edwards
  - 6. Richard Granoff
  - 7. Grouped Intervenors
    - a. Bella Nonna Restaurant & Pizzeria
    - b. Greenwich Chiropractic & Nutrition
    - c. Joel Paul Berger
    - d. Meg Glass
  - 8. Cecilia Morgan
  - 9. Town of Greenwich
  - 10. Morningside Circle Association

III. Appearance by Party:

Office of Consumer Counsel

Representative:

Lauren Henault Bidra, Esq., Staff Attorney Joseph A. Rosenthal, Esq. Principal Attorney

- 1. Administrative Notice.
  - 1.
- B. Exhibits for Identification.

1.

- C. Swear Witnesses
- D. Full Exhibits Verification of exhibits by witnesses and admission by the Council.
- D. Cross Examination.
  - 1. Council
  - 2. Applicant
  - 3. Parker Stacy
  - 4. Field Point Estate Townhouses
  - 5. Christine Edwards
  - 6. Richard Granoff
  - 7. Grouped Intervenors
    - a. Bella Nonna Restaurant & Pizzeria
    - b. Greenwich Chiropractic & Nutrition
    - c. Joel Paul Berger
    - d. Meg Glass
  - 8. Cecilia Morgan
  - 9. Town of Greenwich
  - 10. Morningside Circle Association

#### IV. Appearance by Intervenor:

Parker Stacy

- A. Administrative Notice.
  - 1. Green Mountain Power Website, *Powerwall Energy When You Need It, available at* <a href="http://www.greenmountainpower.com/">http://www.greenmountainpower.com/</a>
  - NY TIMES BUSINESS DAY, "Utility Helps Wean Vermonters From the Electric Grid" Article, July 29, 2017 available at: https://www.nytimes.com/2017/07/29/business/energy-environment/vermont-green-mountain-power-grid.html
- B. Exhibits for Identification.
  - 1. Parker Stacy's Pre-filed Testimony, dated July 10, 2017
- C. Swear Witnesses

V.

- D. Full Exhibits Verification of exhibits by witnesses and admission by the Council. E. Cross Examination. 1. Council 2. Applicant 3. Office of Consumer Counsel 4. Field Point Estate Townhouses 5. Christine Edwards 6. Richard Granoff 7. Grouped Intervenors a. Bella Nonna Restaurant & Pizzeria b. Greenwich Chiropractic & Nutrition c. Joel Paul Berger d. Meg Glass Cecilia Morgan 8. Town of Greenwich 10. Morningside Circle Association Appearance by Intervenor: Field Point Estate Townhouses, Inc. Representatives: Carissa Depetris Dwight Ueda A. Administrative Notice. 1. B. Exhibits for Identification. 1.
  - C. Swear Witnesses
  - D. Full Exhibits Verification of exhibits by witnesses and admission by the Council.
  - E. Cross Examination.
    - 1. Council
    - 2. Applicant
    - 3. Office of Consumer Counsel
    - 4. Parker Stacy
    - 5. Christine Edwards
    - 6. Richard Granoff
    - 7. Grouped Intervenors
      - a. Bella Nonna Restaurant & Pizzeria
      - b. Greenwich Chiropractic & Nutrition
      - c. Joel Paul Berger
      - d. Meg Glass

Docket No. 461A
Hearing Program
September 5, 2017
Pg. 13

- 8. Cecilia Morgan
- 9. Town of Greenwich
- 10. Morningside Circle Association

# VI. Appearance by Intervenor:

Christine Edwards

- A. Administrative Notice.
- 2. Exhibits for Identification.

1.

- C. Swear Witnesses
- D. Full Exhibits Verification of exhibits by witnesses and admission by the Council.
- E. Cross Examination.
  - 1. Council
  - 2. Applicant
  - 3. Office of Consumer Counsel
  - 4. Parker Stacy
  - 5. Field Point Estate Townhouses
  - 6. Richard Granoff
  - 7. Grouped Intervenors
    - a. Bella Nonna Restaurant & Pizzeria
    - b. Greenwich Chiropractic & Nutrition
    - c. Joel Paul Berger
    - d. Meg Glass
  - 8. Cecilia Morgan
  - 9. Town of Greenwich
  - 10. Morningside Circle Association

# VII. Appearance by Intervenor:

Richard Granoff

- A. Administrative Notice.
- B. Exhibits for Identification.

1.

- C. Swear Witnesses
- D. Full Exhibits Verification of exhibits by witnesses and admission by the Council.
- E. Cross Examination.
  - 1. Council
  - 2. Applicant
  - 3. Office of Consumer Counsel
  - 4. Parker Stacy

- 5. Field Point Estate Townhouses
- 6. Christine Edwards
- 7. Grouped Intervenors
  - a. Bella Nonna Restaurant & Pizzeria
  - b. Greenwich Chiropractic & Nutrition
  - c. Joel Paul Berger
  - d. Meg Glass
- 8. Cecilia Morgan
- 9. Town of Greenwich
- 10. Morningside Circle Association

VIII. Appearance by Grouped Intervenors:

Bella Nonna Restaurant & Pizzeria

Joel Paul Berger Meg Glass

Representatives:

Anthony Crudele Joel Paul Berger Meg Glass

- A. Administrative Notice.
- B. Exhibits for Identification.

1.

- 3. Swear Witnesses
- D. Full Exhibits Verification of exhibits by witnesses and admission by the Council.
- E. Cross Examination.
  - 1. Council
  - 2. Applicant
  - 3. Office of Consumer Counsel
  - 4. Parker Stacy
  - 5. Pet Pantry
  - 6. Field Point Estate Townhouses
  - 7. Christine Edwards
  - 8. Richard Granoff
  - 9. Cecilia Morgan
  - 10. Town of Greenwich
  - 11. Morningside Circle Association

IX. Appearance by Intervenor:

Cecilia Morgan

- A. Administrative Notice.
- B. Exhibits for Identification.

1.

- C. Swear Witnesses
- D. Full Exhibits Verification of exhibits by witnesses and admission by the Council.
- E. Cross Examination.
  - 1. Council
  - 2. Applicant
  - 3. Office of Consumer Counsel
  - 4. Parker Stacy
  - 5. Field Point Estate Townhouses
  - 6. Christine Edwards
  - 7. Richard Granoff
  - 8. **Grouped Intervenors** 
    - a. Bella Nonna Restaurant & Pizzeria
    - b. Greenwich Chiropractic & Nutrition
    - c. Joel Paul Berger
    - d. Meg Glass
  - 9. Town of Greenwich
  - 10. Morningside Circle Association

X. Appearance by Party:

Town of Greenwich

Representatives:

David A. Ball, Esq. David E. Dobin, Esq. Cohen & Wolf, P.C.

A. Administrative Notice.

1.

- B. Exhibits for Identification.
  - 1. Town of Greenwich Pre-filed Testimony with attachments, dated July 18, 2017
    - a. Katharine A. DeLuca, Director of Planning and Zoning, Town of Greenwich
    - b. Mitchell E. Mailman, Technical Consultant for the Town of Greenwich
    - c. James W. Michel, Deputy Commissioner of Public Works, Town of Greenwich
    - d. Denise M. Savageau, Conservation Director, Town of Greenwich
    - e. Amy J. Siebert, Commissioner of Public Works, Town of Greenwich
    - f. Bruce Spaman, Superintendent, Parks and Trees Division, Department of Parks and Recreation, Town of Greenwich
  - 2. Town of Greenwich Responses to CSC Interrogatories, dated July 18, 2017
  - 3. Town of Greenwich Supplemental Pre-filed Testimony, dated August 22, 2017
  - 4. Town of Greenwich Late-Filed Exhibit, dated September 1, 2017
- C. Swear Witnesses
  - 1. Katharine DeLuca, AICP, Director of Planning and Zoning
  - 2. Mitchell E. Mailman, Technical Consultant
  - 3. James W. Michel, Deputy Commissioner of Public Works
  - 4. Denise M. Savageau, Conservation Director;

- 5. Amy J. Siebert, P.E., Commissioner of Public Works
- 6. Bruce Spaman, Superintendent, Parks and Recreation Director, Department of Parks and Recreation
- D. Full Exhibits Verification of exhibits by witnesses and admission by the Council.
- E. Cross Examination
  - 1. Council
  - 2. Applicant
  - 3. Office of Consumer Counsel
  - 4. Parker Stacy
  - 5. Field Point Estate Townhouses
  - 6. Christine Edwards
  - 7. Richard Granoff
  - 8. Grouped Intervenors
    - a. Bella Nonna Restaurant & Pizzeria
    - b. Greenwich Chiropractic & Nutrition
    - c. Joel Paul Berger
    - d. Meg Glass
  - 9. Cecilia Morgan
  - 10. Morningside Circle Association

XI. Appearance by Intervenor:

Representatives:

Morningside Circle Association

P. Jude Collins, President Morningside Circle Association

- A. Administrative Notice.
  - 1.
- B. Exhibits for Identification.
  - 1. Morningside Circle Association Request for Intervenor Status, dated May 2, 2017
- C. Swear Witnesses
  - 1. P. Jude Collins, President
- F. Full Exhibits Verification of exhibits by witnesses and admission by the Council.
- G. Cross Examination
  - 1. Council
  - 2. Applicant
  - 3. Office of Consumer Counsel
  - 4. Parker Stacy
  - 5. Field Point Estate Townhouses
  - 6. Christine Edwards
  - 7. Richard Granoff
  - 8. Grouped Intervenors

- a. Bella Nonna Restaurant & Pizzeria
- b. Greenwich Chiropractic & Nutrition
- c. Joel Paul Berger

- d. Meg Glass

  9. Cecilia Morgan

  10. Town of Greenwich
- Closing or Continuation by Connecticut Siting Council. XII.