



STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

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Hearing Program
Petition No. 1120
Tuesday, March 31, 2015
3:00 p.m./7:00 p.m.
The Education Center, 2nd Floor Conference Room,
501 Kings Highway East, Fairfield, Connecticut

I. Opening by Council

- A. Statement read by Chair.
- B. Comments by Public Official(s) (if any)
- C. Motions (if any)
 - 1. Intervenor Arthur Tournas request for meeting with UI, dated March 13, 2015.
 - 2. Intervenor Arthur Tournas request for walk through of abutting properties, dated March 19, 2015.
- 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 http://www.niehs.nih.gov/health/assets/docs_p_z/results_of_emf_research_emf_questions_answers_booklet.pdf
- 2. NATIONAL RESEARCH COUNCIL, *Research on Power-Frequency Fields Completed Under the Energy Policy Act of 1992*, National Academy of Sciences, 1999, available at <http://books.nap.edu/openbook.php?isbn=0309065437>
- 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 <http://www.archives.gov/federal-register/executive-orders/2013.html>
- 5. UNITED STATES DEPARTMENT OF THE INTERIOR, NATIONAL PARK SERVICE, *National Register of Historic Places*, July 2010, available at <http://www.nps.gov/history/nr/research/index.htm>
- 6. FEDERAL AVIATION ADMINISTRATION, UNITED STATES DEPARTMENT OF TRANSPORTATION, OBSTRUCTION MARKING AND LIGHTING, ADVISORY CIRCULAR AC70/7460-1K (February 2007), available at https://ocaaa.faa.gov/ocaaa/external/content/AC70_7460_1K.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 <http://ferc.gov/legal/staff-reports/05-31-2012-ne-outage-report.pdf>
8. NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION, Critical Infrastructure Protection, CIP-014-1, Physical Security Standards, May 1, 2014, available at <http://www.nerc.com/pa/Stand/Reliability%20Standards/CIP-014-1.pdf>

REGIONAL

9. ISO-NEW ENGLAND, INC., *Power Generation and Fuel Diversity in New England*, August 25, 2005, available at http://www.iso-ne.com/pubs/whtpprs/iso_ne_paper.pdf
10. 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
11. ISO NEW ENGLAND, *2014 Regional System Plan*, November 6, 2014, <http://www.iso-ne.com/system-planning/system-plans-studies/rsp>
12. ISO-NEW ENGLAND, INC., *Forecast Report of Capacity, Energy, Loads & Transmission (CELT)*, May 16, 2014, available at http://www.iso-ne.com/trans/celt/report/2014/2014_celt_report_rev.pdf

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13. 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 <http://www.ct.gov/csc/emf-bmp>
14. CONNECTICUT SITING COUNCIL, *2012/2013 Forecast of Electric Loads and Resources*, December 12, 2013, available at http://www.ct.gov/csc/lib/csc/pendingproceeds/forecast_2012_2013/f2012_13_finalreport20131212.pdf
15. CONNECTICUT SITING COUNCIL, *White Paper on the Security of Siting Energy Facilities*, October 8, 2009, available at http://www.ct.gov/csc/lib/csc/docket_346/whiteppr_final.pdf
16. 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
17. CONNECTICUT SITING COUNCIL, PETITION 1120, *Letter to Richard Reed, PMP, Vice President – Engineering and Project Excellence, from Melanie Bachman, Acting Executive Director, Connecticut Siting Council, regarding Petition Completeness Review, dated November 6, 2014.*
18. CONNECTICUT SITING COUNCIL, PETITION 1120, *Field Review Notice, dated November 25, 2014.*

19. CONNECTICUT SITING COUNCIL, PETITION 1120, *Protective Order Concerning UI's Provision of Confidential and Proprietary Information in relation to Critical Energy Infrastructure Information*, dated December 11, 2014.
20. CONNECTICUT SITING COUNCIL, PETITION 1120, *Connecticut Siting Council memo regarding Petition 1120 date for decision*, dated December 16, 2014.

Department of Energy and Environmental Protection

21. 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 http://www.ct.gov/dep/cwp/view.asp?a=2720&q=325660&depNav_GID=1654
22. State of Connecticut Department of Energy and Environmental Protection, *The Connecticut Stormwater Quality Manual*, 2004, and appendices, available at http://www.ct.gov/DEP/cwp/view.asp?a=2721&q=325704&depNav_GID=1654
23. STATE OF CONNECTICUT, DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION, *Amphibians and Reptiles in Connecticut*, DEP Bulletin 32, Michael W. Klemens, 2000, available at <http://ctdepstore.com/Amphibians-and-Reptiles-in-Connecticut-101.htm>
24. 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
25. 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>
26. 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 <http://www.ct.gov/deep/lib/deep/regulations/22a/22a-69-1through7.pdf>
27. STATE OF CONNECTICUT, DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION, *2014 Integrated Resource Plan for Connecticut*, March 17, 2015, available at <http://www.dpuc.state.ct.us/DEEPEnergy.nsf/c6c6d525f7cdd1168525797d0047c5bf/8e95d81c37c7237085257e0b004770b2?OpenDocument>
28. STATE OF CONNECTICUT, DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION, *2013 Comprehensive Energy Strategy for Connecticut*, February 19, 2013, available at http://www.ct.gov/deep/lib/deep/energy/cep/2013_ces_final.pdf

Department of Public Health

29. STATE OF CONNECTICUT, DEPARTMENT OF PUBLIC HEALTH, *Electric and Magnetic Fields (EMF): Health Concerns Fact Sheet*, April 2008, available at http://www.ct.gov/dph/lib/dph/environmental_health/eoha/pdf/emf_fact_sheet_-_2008.pdf

Department of Transportation

30. 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>

Other State Agencies

31. PUBLIC UTILITIES REGULATORY AUTHORITY, *Cybersecurity and Connecticut's Public Utilities*, April 14, 2014, available at http://www.ct.gov/pura/lib/pura/electric/cyber_report_041414.pdf
32. 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
33. STATE OF CONNECTICUT, OFFICE OF POLICY AND MANAGEMENT, *Conservation and Development Policies Plan for Connecticut 2013-2018*, June 5, 2013, available at http://www.ct.gov/opm/lib/opm/igp/org/cdupdate/2013-2018_cd_plan.pdf
34. Final Report of the Two Storm Panel, January 9, 2012, available at http://www.governor.ct.gov/malloy/lib/malloy/two_storm_panel_final_report.pdf
35. STATE OF CONNECTICUT, CLEAN ENERGY FINANCE AND INVESTMENT AUTHORITY, *Comprehensive Plan FY 2013 through FY 2015*, available at <http://www.ctcleanenergy.com/Portals/0/FY13%20Comprehensive%20Plan.pdf>
36. 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 http://www.ct.gov/demhs/lib/demhs/ct_srf_aug_2011.pdf
37. 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 http://www.ct.gov/demhs/lib/demhs/eppi/esf_12_all-hazards_energy_and_utilities_annex_final_draft_july_2012.pdf

38. 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 http://www.ct.gov/deep/lib/deep/climatechange/connecticut_climate_preparedness_plan_2011.pdf

TECHNICAL

39. 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 <http://standards.ieee.org/findstds/standard/644-1994.html>
40. INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, *IEEE Guide for the Design, Construction, and Operation of Safe and Reliable Substations for Environmental Acceptance*, IEEE Std 1127-1998, Reaffirmed 2009, available for purchase at <http://standards.ieee.org/findstds/standard/1127-1998.html>
41. INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, *National Electrical Safety Code*, American National Standards Institute, Standard C2-2012, August 1, 2011.
42. EXPONENT, INC., *EMF and Health: Review and Update of the Scientific Research*, January 28, 2009, available at <http://transmission.bchydro.com/NR/rdonlyres/DEF09171-908A-48DF-A9DA-F28676D239FD/0/Exponent2009EMFUpdate0209.pdf>
43. EXPONENT, INC., *Current Status of Research on Extremely Low Frequency Electric and Magnetic Fields and Health: Interstate Reliability Project*, January 10, 2011, available at http://www.ct.gov/csc/lib/csc/pendingproceeds/docket_424/424_application/v1interstate_csc_application_v1.pdf (Appendix D EMF Health Report)

ENVIRONMENTAL

44. RICHARD M. DEGRAAF & DEBORAH D. RUDIS, *New England Wildlife: Habitat, Natural History, and Distribution*, University of Massachusetts Press, 1983, available at <http://www.treesearch.fs.fed.us/pubs/4148>
45. 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 <http://www.umaine.edu/vernalpools/PDFs/Best%20Development%20Practices%20-%20Conserving%20Pool-breeding%20Amph.pdf>
46. 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 <http://www.environmental-expert.com/Files/0/articles/9373/Conservingpool-breeding.pdf>

MAPS

47. 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

48. STATE OF CONNECTICUT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION, *Natural Diversity Database Map for the Towns of Easton and Fairfield*, last updated December 2014, available at <http://www.depdata.ct.gov/naturalresources/endangeredspecies/nddbpdfs.asp>
49. CONNECTICUT FOREST & PARK ASSOCIATION, *Connecticut Walk Book West*, Ann T. Colson, ed., 19th ed. 2006, available at <http://www.ctwoodlands.org/node/17>
50. National Audubon Society, *Connecticut Important Bird Areas*, last updated June 25, 2010, available at <http://netapp.audubon.org/iba/state/US-CT>
51. Mail-A-Map Street Map, Towns of Fairfield/Easton, available at <http://mailamap.com/street-maps>
52. UNITED STATES GEOLOGICAL SURVEY, *Connecticut Topographic Map Collection*, available at http://magic.lib.uconn.edu/topographic_maps.html
53. STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION, *Connecticut Official State Tourism Map*

E. State Agency comments

F. Municipal comments

II. Appearance by Petitioner

Petitioner: The United Illuminating Company (UI)

Representative: Bruce L. McDermott, Esq.
UIL Holdings Corporation

A. Administrative Notice.

1.

B. Exhibits for Identification.

1. Petition for a Declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the proposed modifications to the Hawthorne Substation located at 180 Hawthorne Drive, Fairfield, Connecticut, filed by The United Illuminating Company, received November 5, 2014, and attachments (subject to Critical Energy Infrastructure Information Protective Order dated December 11, 2014)
 - a. Development & Management Plan
 - b. Affidavit of Service of Notice, dated October 29, 2014
2. Petitioner's Affidavit of Service of Notice, dated December 2, 2014
3. Email from Adla Reddy, UI Project Manager, regarding photo rendering of proposed pavement area at Hawthorne Substation, with Photo Simulation Attachment, dated December 5, 2014
4. Petitioner's Response to Council Interrogatories, Set One, dated December 30, 2014

5. Letter to Town of Easton regarding Project Notice, dated January 22, 2015
6. Petitioner's Materials, with cover letter, presented to the Town of Fairfield and residents at a February 4, 2015 public information meeting, dated February 27, 2015
 - a. Slideshow Materials
 - b. FAQ Sheet
 - c. Site Plan
 - d. Visibility Analysis
7. Petitioner's Affidavit of Sign Posting, dated March 13, 2015
8. Petitioner's Response to Council Interrogatories, Set Two, dated March 16, 2015
9. Petitioner's Response to Town of Fairfield Interrogatories, Set One, dated March 16, 2015
10. Petitioner's Response to Town of Fairfield Interrogatories, Set Two, dated March 23, 2015
11. Petitioner's Response to Arthur Tournas Interrogatories, Set One, dated March 23, 2015
12. Petitioner's Response to Arthur Tournas Interrogatories, Set Two, dated March 23, 2015
13. Petitioner's Response to Arthur Tournas Interrogatories, Set Three, dated March 23, 2015
14. Petitioner's Response to Vincent Giandurco Interrogatories, dated March 23, 2015
15. Hawthorne Substation Project Noise Evaluation Report prepared by Black & Veatch and related cover letter, dated March 24, 2015
16. Petitioner's Letter Regarding the Electric and Magnetic Field Assessment of the Hawthorne Substation, dated March 24, 2015, with attachments (subject to Critical Energy Infrastructure Information Protective Order dated December 11, 2014)

C. Swear Witnesses

1. Matthew P. Cloud, Transmission & Substation Engineer, UI
2. Ronald M. Rossetti, PE, PMP, Engineering & Project Excellence, UI
3. Tony Buccheri, PMP, Director, Transmission & Substation Project Management, UI
4. David Bradt, Director, Transmission Planning, UI
5. Bohdan Katreczko, Manager, Environmental and Real Estate Services, UI
6. Ryan L. Baker, Acoustic Specialist, Black & Veatch LLP
7. Dr. Amy Williams, Ph.D., DABT, Managing Scientist, Exponent
8. Rick Landino, Graphics Specialist, All-Points Technology Corporation, P.C.
9. Dennis Quinn, CT Herp Consultant, LLC

D. Full Exhibits - Verification of exhibits by witnesses and admission by the Council.

E. Cross Examination.

1. Council
2. Party: The Town of Fairfield (Attorney Lesser)
3. Intervenors: Arthur Tournas and Vincent Giandurco

III. Appearance by Grouped Intervenors: Arthur Tournas
Vincent Giandurco

A. Administrative Notice.

B. Exhibits for Identification.

1. Arthur Tournas' Request for Intervenor Status, dated January 28, 2015.
2. Vincent Giandurco's Request for Intervenor Status, dated February 10, 2015
3. Photographs Submitted by Arthur Tournas, received via email March 4, 2015, and with hard copies submitted March 16, 2015
4. Arthur Tournas' Response to Council Interrogatory regarding submitted photographs (via two emails), dated March 19, 2015
5. Arthur Tournas' Photographs from 186 Schiller Road, dated March 19, 2015
6. Comments from Arthur Tournas regarding Development and Management Plan, dated March 24, 2015
7. Arthur Tournas' Two Aerial Photographs (UI's Trumbull Substation/UI's Bridgeport Substation), dated March 24, 2015
8. Pre-filed Testimony of Arthur Tournas, submitted March 26, 2015
9. Pre-filed Testimony of Stacy Tournas, dated February 19, 2015
10. Pre-filed Testimony of Gary and Jackie Azarian, dated February 20, 2015
11. 186 Schiller Road Quit-Claim Deed, received March 26, 2015
12. Pre-filed Testimony of Vincent Giandurco with photo attachments, received March 26, 2015

C. Swear Witnesses

1. Arthur Tournas
2. Gary Azarian
3. Stacy Tournas
4. Vincent Giandurco

D. Full Exhibits - Verification of exhibits by witnesses and admission by the Council.

E. Cross Examination.

1. Council
2. Petitioner: The United Illuminating Company (Attorney McDermott)
3. Party: Town of Fairfield (Attorney Lesser)

- IV. Appearance by Party: The Town of Fairfield
- Representative: Stanton H. Lesser, Esq., Town Attorney
- A. Administrative Notice.
- 1.
- B. Exhibits for Identification.
1. Town of Fairfield's Request for Party Status, dated January 14, 2015
 2. Town of Fairfield Conservation Commission Comments, dated December 5, 2014
 3. Town of Fairfield Director of Public Works Comments, dated January 7, 2015
 4. Town of Fairfield Letter Regarding Notification to Abutting Property Owners, dated February 17, 2015
 5. Town of Fairfield Conservation Commission Comments, dated March 17, 2015
 6. Town of Fairfield Comments from William Hurley P.E., Engineering Manager, dated March 23, 2015
- C. Swear Witnesses
1. William Hurley, P.E., Fairfield Town Engineer
 2. Annette Jacobson, Fairfield Conservation Administrator
- D. Full Exhibits - Verification of exhibits by witnesses and admission by the Council.
- E. Cross Examination.
1. Council
 2. Petitioner: The United Illuminating Company (Attorney McDermott)
 3. Intervenors: Arthur Tournas and Vincent Giandurco
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- V. Closing by Connecticut Siting Council.