STATE OF CONNECTICUT CONNECTICUT SITING COUNCIL

NORTHEAST UTILITIES SERVICE COMPANY APPLICATION TO THE CONNECTICUT SITING COUNCIL FOR A CERTIFICATE OF **ENVIRONMENTAL COMPATIBILITY** AND PUBLIC NEED ("CERTIFICATE") FOR THE CONSTRUCTION OF A **NEW 345-KV ELECTRIC TRANSMISSION** LINE FACILITY AND ASSOCIATED **FACILITIES BETWEEN SCOVILL ROCK SWITCHING STATION IN** MIDDLETOWN AND NORWALK SUBSTATION IN NORWALK. INCLUDING THE RECONSTRUCTION OF PORTIONS OF EXISTING 115-KV AND 345-KV **ELECTRIC TRANSMISSION LINES.** THE CONSTRUCTION OF BESECK **SWITCHING STATION IN** WALLINGFORD, EAST DEVON SUBSTATION IN MILFORD, AND SINGER SUBSTATION IN BRIDGEPORT. MODIFICATIONS AT SCOVILL ROCK SWITCHING STATION AND NORWALK SUBSTATION, AND THE RECONFIGURATION OF CERTAIN INTERCONNECTIONS

DOCKET NO. 272

APRIL 2, 2004

THE TOWNS OF BETHANY, CHESHIRE, DURHAM, EASTON, FAIRFIELD, HAMDEN, MIDDLEFIELD, MILFORD, NORTH HAVEN, NORWALK, ORANGE, WALLINGFORD, WESTON, WESTPORT, WILTON, AND WOODBRIDGE

SIXTH SET OF INTERROGATORIES TO THE CONNECTICUT LIGHT AND POWER COMPANY AND THE UNITED ILLUMINATING COMPANY

The above-captioned towns (collectively, the "Towns"), each a party in the above-captioned proceeding, hereby request that The Connecticut Light & Power

Company ("CL&P") and The United Illuminating Company ("UI") answer the following interrogatories. CL&P and UI are sometimes hereinafter referred to collectively as the "Applicants." ¹ The interrogatories are addressed to both of the Applicants; the Towns request that the Applicants provide responses to the interrogatories on or before April 19, 2004.

If there are objections to any of the interrogatories, or if providing responses to particular interrogatories (or portions thereof) would be unduly burdensome, the Towns request that the Applicants contact the undersigned as soon as possible.

In the event that any interrogatory requests specific data or information that has already been provided in this proceeding, the Applicants need only specifically identify where the responsive data or information is located in the record.

I. <u>DEFINITIONS</u>

A. As used in these interrogatories, "any" shall include "all," and "all" shall include "any," as needed to make the request inclusive and not exclusive.

- B. As used in these interrogatories, "and" shall include "or," and "or" shall include "and," as needed to make the request inclusive and not exclusive. For example, both "and" and "or" mean "and/or."
- C. As used in these interrogatories, "include" and "including" mean "including but not limited to."
- D. As used in these interrogatories, "CL&P" means The Connecticut Light & Power Company and its present or former subsidiaries, affiliates, branches, divisions, principals, associated persons, control persons, directors, officers, employees, agents, trustees and beneficiaries. Each reference to CL&P shall be deemed to include any, all, or any grouping or subgrouping of persons

2

_

¹ The undersigned represent solely the towns of Durham and Wallingford in this proceeding. The undersigned have been authorized to proffer the instant interrogatories on behalf of the Towns.

and entities named in the foregoing enumeration as needed to make the reference inclusive and not exclusive.

E. As used in these interrogatories, "UI" means The United Illuminating Company and its present or former subsidiaries, affiliates, branches, divisions, principals, associated persons, control persons, directors, officers, employees, agents, trustees and beneficiaries. Each reference to UI shall be deemed to include any, all, or any grouping or subgrouping of persons and entities named in the foregoing enumeration as needed to make the reference inclusive and not exclusive.

SIXTH SET OF TOWNS INTERROGATORIES TO CL&P/UI

- 1. Reference the Applicants' response to CSC-28.
 - a. Please explain the bases for, and provide the analyses forming the basis for, the conclusion that while two circuits are specified for the underground segments of the proposed Project between East Devon and Singer Substations and Singer and Norwalk Substations, three circuits would be specified for any underground line between East Devon and Beseck Substations, and four circuits would be specified between the Beseck Substation and Oxbow Junction and Black Pond.
 - b. Please explain in detail, and provide any supporting documentation, the reasons why including two circuits (instead of three circuits) would not be adequate for an underground line between East Devon and Beseck.
 - c. Please explain in detail, and provide any supporting documentation, the reasons why including two circuits (instead of four circuits) would not be adequate for an underground line between Beseck and Oxbow or Beseck and Black Pond.
- 2. Reference the Applicants' response to CSC-28.
 - Quantify the levels of capacitance existing on Connecticut's transmission system and the amount by which this capacitance level is higher than it was in the past.
 - b. Provide the data which forms the basis for the statement that the level of capacitance on Connecticut's transmission system is "higher than that of other electric utilities in the region."
 - c. Quantify the amounts by which undergrounding of each of the following segments would increase the system capacitance: the line segment between Oxbow Junction and Beseck, the line segment between Black Pond and Beseck and the line segment between Beseck and East Devon.

- 3. Reference the December 31, 2003 PowerGEM "Southwest Connecticut Transmission, East Shore to Norwalk 345 KV OH/UG Alternative," included as an Attachment to the January 8, 2004 Appendum #1 to the Supplemental Filing. At page 5 of this report, PowerGEM listed six bulleted changes that were made to the Middletown to Norwalk base case "to reconfigure the system appropriately to simulate the "East Shore 27-OH/UG configuration."
 - a. Please describe in detail the basis for modeling each listed change from the base as part of the East Shore configuration and provide copies of any analyses or other documents that formed the basis for that change. Please also explain why each such change from the base case is necessary to appropriately model a potential East Shore route or configuration.
 - b. Provide the documentation in which the referenced "instructions from UI" or any other instructions from the Applicants were provided to PowerGEM.
 - c. Detail the reconfiguring of the East Shore substation that was done to increase the rating of the East Shore to Scovill Rock 345 kV line.
- 4. Please explain whether the Applicants' proposed East Shore route includes each of the following elements of the proposed Middletown to Norwalk Project. If the answer is no, please explain in detail why not:
 - a. The proposed 345-kV line from Scovill Rock Switching Station to Chestnut Junction.
 - b. The proposed 345-kV line from Oxbow Junction to the proposed Beseck Substation.
 - c. The proposed 345-kV line from Black Pond Junction to the proposed Beseck substation.
 - d. The proposed Beseck Substation. Please note that if a more limited substation is included for Beseck, please detail all of the differences between that more limited substation and the substation at Beseck that would be included as part of the proposed Middletown to Norwalk Project.
- 5. Specify, and quantify where applicable, the criteria that GE uses when performing harmonic and switching transient analyses to determine whether a configuration being examined in adequate and should be recommended. Please also provide the GE documents which set out these criteria.
- 6. Reference Addendum #2 to the Supplemental Filing, at pages 2 and 3.
 - a. Explain the current status of the investigation of whether the 387 line transmission structures could support conductors with a

- capacity larger than 2-954 ACSR, and if so, how that would affect the thermal load flow results. Please also state when these analyses will be completed.
- b. Please provide the analyses, reports, workpapers and source documents for the investigation of whether the 387 line transmission structures could support conductors with a capacity larger than 2-954 ACSR and if so, how that would affect the thermal load flow results.
- c. Provide the documentation in which the ISO-NE SCWG informed the Companies that any thermal analysis of the East Shore Alternative must include generation dispatches that model the unavailability of the New Haven Harbor Generating Station and/or New York transfer analyses in accordance with NEPOOL standards and procedures.
- d. Provide the NEPOOL standards and procedures which mandate that any thermal analysis of the East Shore Alternative must include generation dispatches that model the unavailability of the New Haven Harbor Generating Station and/or New York transfer analyses.
- 7. Reference the ISO-NE Southwest Connecticut Study Group report that was provided in Addendum #3 to the Supplemental Filing.
 - a. Please state whether the modeling of the East Shore Alternative performed for the ISO-NE Study Group also reflected the system changes described at page 5 of the December 31, 2003 PowerGEM Report attached to Addendum #1 to the Supplemental Filing.
 - b. In particular, please explain whether the rating of the East Shore to Scovill Rock 345 kV line was increased in this modeling the reflect the reconfiguring of the East Shore substation and the removal of the 345/115 kV autotransformers from the 387 line path. If the answer is no, please explain why not.

Respectfully submitted,

THE TOWNS OF BETHANY, CHESHIRE, DURHAM, EASTON, FAIRFIELD, HAMDEN, MIDDLEFIELD, MILFORD, NORTH HAVEN, NORWALK, ORANGE, WALLINGFORD, WESTON, WESTPORT, WILTON, AND WOODBRIDGE

BY_____

Peter G. Boucher Alan P. Curto Halloran & Sage LLP 225 Asylum Street Hartford, CT 06103 Tel: (860) 522-6103

Fax: (860) 548-0006 Their Attorneys

Certification

I hereby certify that a copy of the foregoing has been mailed, e-mailed and/or hand-delivered to all known parties and intervenors of record this 2nd day of April, 2004.

Northeast Utilities Service Company Anthony M. Fitzgerald, Esq. Brian T. Henebry, Esq. Carmody & Torrance LLP 50 Leavenworth Street PO Box 1110 Waterbury, CT 06721

Linda L. Randell, Esq. Bruce L. McDermott, Esq. Wiggin & Dana, LLP One Century Tower New Haven, CT 06508-1832

Norwalk Association of Silvermine Homeowners c/o Leigh Grant 99 Comstock Hill Road Norwalk, CT 06850

Honorable Robert W. Megna State Representative 97th District 40 Foxon Hill Road, #54 New Haven, CT 06513

Honorable Al Adinolfi State Representative 103rd District 235 Sorghum Mill Drive Cheshire, CT 06410

Eric Knapp, Esq. Branse & Willis, LLC 41-C New London Turnpike Glen Lochen East Glastonbury, CT 06033-2038 Julie Donaldson Kohler, Esq. Hurwitz & Sagarin, LLC 147 North Broad Street Milford, CT 06460

Janis M. Small, Esq. Town Attorney Wallingford Town Hall 45 South Main Street Wallingford, CT 06492

Town of Westport c/o Ira W. Bloom, Esq. 27 Imperial Avenue Westport, CT 06880

Louis S. Ciccarello Corporation Counsel Norwalk City Hall P.O. Box 798 Norwalk, CT 06856-0798

Honorable Mary G. Fritz State Representative 90th District 43 Grove Street Yalesville, CT 06492

David A. Ball, Esq. Cohen and Wolf, P.C. 1115 Broad Street PO Box 1821 Bridgeport, CT 06601-1821

Deborah L. Moore, Esq. Legal Department City Hall 142 East Main Street Meriden, CT 06450 Attorney General Richard Blumenthal c/o Michael C. Wertheimer Assistant Attorney General Office of the Attorney General 10 Franklin Square New Britain, CT 06051

Honorable Themis Klarides State Representative 114 District 23 East Court Derby, CT 06418

Lawrence J. Golden, Esq. Pullman & Comley, LLC 90 State House Hartford, CT 06103-3702

Anthony M. Macleod, Esq. Whitman Breed Abbott & Morgan LLC 100 Field Point Road Greenwich, CT 06830

Arthur W. Gruhn, P.E. Chief Engineer Department of Transportation 2800 Berlin Turnpike PO Box 317546 Newington, CT 06131

Honorable John E. Stripp State Representative – 135th District 4 Scatacook Trail Weston, CT 06883

Honorable Kenneth A. Flatto First Selectman Independence Hall 725 Old Post Road Fairfield, CT 06824 David A. Reif Jane K. Warren Joel B. Casey McCarter & English, LLP CityPlace I Hartford, CT 06103

Monte E. Frank, Esq. Cohen and Wolf, P.C. 158 Deer Hill Avenue Danbury, CT 06810

Andrew W. Lord, Esq. Murtha Cullina LLP CityPlace I, 29th Floor 185 Asylum Street Hartford, CT 06103

Mitchell R. Goldblatt First Selectman Town of Orange 617 Orange Center Road Orange, CT 06477

Robert E. Earley
Connecticut Business & Industry
Assoc.
350 Church Street
Hartford, CT 06103
Richard J. Buturla, Esq.
Town Attorney
Berchem, Moses & Devlin, PC
75 Broad Street
Milford, CT 06460

Joaquina Borges King Assistant Town Attorney Hamden Government Center 2750 Dixwell Avenue Hamden, CT 06518

Timothy P. Lynch Deputy City Attorney 245 deKoven Drive PO Box 1300 Middletown, CT 06457 Honorable Derrylyn Gorski First Selectman Bethany Town Hall 40 Peck Road Bethany, CT 06524

Honorable Raymond Kalinowski State Representative 100th District PO Box 391 Durham, CT 06422

Melanie J. Howlett Associate City Attorney Office of the City Attorney 999 Broad Street Bridgeport, CT 06604

Trish Bradley, President Ed Schwartz, Treasurer Communities for Responsible Energy, Phase II 45 Ironwood Lane Durham, CT 06422

Office of Consumer Counsel Bruce C. Johnson Litigation Attorney Office of Consumer Counsel Ten Franklin Square New Britain, CT 06051

William J. Kupinse, Jr. First Selectman Easton Town Hall 225 Center Road PO Box 61 Easton, CT 06612

Honorable William A. Aniskovich State Senate - 12th District 15 Grove Avenue Branford, CT 06405

David J. Monz Updike, Kelly & Spellacy, P.C. One Century Tower 265 Church Street New Haven, CT 06510

David R. Schaefer, Esq. Brenner Saltzman & Wallman, LLP 271 Whitney Avenue New Haven, CT 06511

Senator Joseph J. Crisco, Jr. 17th District State Capitol Hartford, CT 06106

Franco Chieffalo General Supervisor First District Water Department PO Box 27 Norwalk, CT 06852

Peter G. Boucher

534249.1(HSFP)