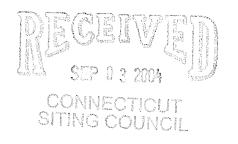
## STATE OF CONNECTICUT CONNECTICUT SITING COUNCIL

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** 



**SEPTEMBER 2, 2004** 

## PRE-HEARING QUESTIONS TO THE CONNECTICUT LIGHT AND POWER COMPANY AND THE UNITED ILLUMINATING COMPANY FROM WOODBRIDGE, MILFORD AND ORANGE

The Town of Woodbridge, the City of Milford, and the Town of Orange submit the following Pre-Hearing Questions to The Connecticut Light and Power Company and the United Illuminating Company (the "Applicant") in connection with the Application to the Connecticut Siting Council for a Certificate of Environmental Compatibility and Public Need 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 (the "Application"). Woodbridge, Milford and Orange request that the Applicant respond on or before *September 16, 2004*.

- 1. Please provide EMF calculations using the same format as Exhibit 1 to Testimony of Dr. William H. Bailey dated July 19, 2004 for Cross Sections 8 (North, Middle and South Segments) under the following conditions:
  - a. based on line loadings of 50% of normal maximum loading.
  - b. based on line loadings of 75% of normal maximum loading.
  - c. based on line loadings of 100% of normal maximum loading.
  - d. based on line loadings at long-term emergency ratings.
- 2. Please provide EMF calculations using the same format as Exhibit 2 to Testimony of Dr. William H. Bailey dated July 19, 2004 for statutory facilities with ID No. P-19, DC-47, S-09, P-48, S-11, and DC-81 under the following conditions:
  - a. based on line loadings of 50% of normal maximum loading.
  - b. based on line loadings of 75% of normal maximum loading.
  - c. based on line loadings of 100% of normal maximum loading.
  - d. based on line loadings at long-term emergency ratings.
- 3. Please provide EMF calculations using the same format as Exhibit 2 to Testimony of Dr. William H. Bailey dated July 19, 2004 for residential areas in Woodbridge, Milford and Orange (which shall be defined as any area in which a residential parcel is located within 300 feet from the line) under the following conditions:
  - a. based on line loadings of 50% of normal maximum loading.
  - b. based on line loadings of 75% of normal maximum loading.
  - c. based on line loadings of 100% of normal maximum loading.
  - d. based on line loadings at long-term emergency ratings.
- 4. With respect to the above questions, please state what values and assumptions were used for normal maximum loading and long term emergency ratings.
- 5. Assuming a system load of 27.7 GW:
  - a. what are the summer peak loading, the winter peak loadings, and the annual average loading, in MVA, of the 345 kV transmission line running from Beseck to East Devon;
  - b. what are the generation dispatch assumptions used to develop the summer peak line loadings,
  - c. what are the generation dispatch assumptions used to develop the winter peak line loadings; and
  - d. please describe in detail how the annual average line loading was determined and provide supporting workpapers.

- 6. Assuming a system load of 30GW:
  - a. what are the summer peak loading, the winter peak loadings, and the annual average loading, in MVA, of the 345 kV transmission line running from Beseck to East Devon;
  - b. what are the generation dispatch assumptions used to develop the summer peak line loadings,
  - c. what are the generation dispatch assumptions used to develop the winter peak line loadings; and
  - d. please describe in detail how the annual average line loading was determined and provide supporting workpapers.

## 7. Assuming a system load of 32GW:

- a. what are the summer peak loading, the winter peak loadings, and the annual average loading, in MVA, of the 345 kV transmission line running from Beseck to East Devon;
- b. what are the generation dispatch assumptions used to develop the summer peak line loadings,
- c. what are the generation dispatch assumptions used to develop the winter peak line loadings; and
- d. please describe in detail how the annual average line loading was determined and provide supporting workpapers.

## 8. Assuming a system load of 34GW:

- a. what are the summer peak loading, the winter peak loadings, and the annual average loading, in MVA, of the 345 kV transmission line running from Beseck to East Devon;
- b. what are the generation dispatch assumptions used to develop the summer peak line loadings,
- c. what are the generation dispatch assumptions used to develop the winter peak line loadings; and
- d. please describe in detail how the annual average line loading was determined and provide supporting workpapers.
- 9. For the EMF measurements for the existing line as shown on Exhibits 1 and 2 of the Testimony of Dr. William H. Bailey dated July 19, 2004 for any of the locations in Woodbridge, Milford, and Orange please provide:
  - a. the system load and generator unit dispatch at the time of the measurement (system-wide); and
  - b. the transmission line loadings at the time of the measurement for the existing line in Woodbridge, Milford and Orange.