STATE OF CONNECTICUT **CONNECTICUT SITING COUNCIL**

NORTHEAST UTILITIES SERVICE **DOCKET NO. 272** 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**

OCTOBER 29, 2004

PRE-HEARING OUESTIONS TO KEMA, INC. FROM THE TOWN OF WOODBRIDGE

The Town of Woodbridge submits the following Pre-Hearing Questions to KEMA, Inc. 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"). The Town of Woodbridge requests that KEMA, Inc. respond on or before November 12, 2004.

- 1. With reference to Table 14 on page 59. This table shows that for the additional 10 miles of undergrounding scenario, the resonances with the 3rd C-Type Filter Option fall below 3.0 for the Southington 345kV and the Southington Ring 1 115kv.
 - a. Please specify what additional measures could be taken to boost these resonances above 3.0.
 - b. Provide copies of any analyses, studies or reports which examined any such additional measures.
- 2. With reference to Table 15 on page 61. This table shows that for the additional 20 miles of undergrounding scenario, the resonances with the 3rd C-Type Filter Option fall below 3.0 for the Southington 345kV and the Southington Ring 1 115kv.
 - a. Please specify what additional measures could be taken to boost these resonances above 3.0.
 - b. Provide copies of any analyses, studies or reports which examined any such additional measures.
- 3. With reference to Table 16 on page 63. This table shows that for the additional 40 miles of undergrounding scenario, the resonance with the 3rd C-Type Filter Option falls below 3.0 for the Southington Ring 1 115kv.
 - a. Please specify what additional measures could be taken to boost this resonance above 3.0.
 - b. Provide copies of any analyses, studies or reports which examined any such additional measures.
- 4. In a format similar to Tables 14, 15, and 16, please provide the results for the analyses of the scenario which includes an additional 15 miles of undergrounding between Devon and Beseck.
- 5. a. Please specify whether Cases II-7, II-8, II-9, and II-10 examined by KEMA all assume that the additional undergrounding would start at either the Devon or the Beseck substations.
 - b. If the answer to part a. of this question is yes, please specify whether KEMA examined any scenarios in which the additional undergrounding did not start at either the Devon or the Beseck substations.
 - c. Please provide the analyses and input and output files for any scenarios examined by KEMA in which the additional undergrounding did not start at either the Devon or Beseck substations.
 - d. Please explain how the results presented in Tables 14 and 15 would change, if at all, if KEMA assumed that the additional underground did not begin contiguous to either the Beseck or Devon substations.

- 6. a. Please explain how the results presented in Table 14 would change, if at all, if KEMA assumed that the additional 10 miles of undergrounding examined in Case II-7 were not in a single ten-mile piece but instead were in two five-mile pieces.
 - b. Please explain how the results presented in Tables 15 would change, if at all, if KEMA assumed that the additional 20 miles of undergrounding examined in Case II-8 were not in a single 20-mile piece but instead were in two ten-mile pieces.
 - c. Please explain how the results presented in Tables 14, 15 or 16 would change, if at all, if KEMA assumed that approximately five miles of the additional undergrounding in Cases II-7, II-8, or II-9 were located in the portion of the proposed Phase II project proposed to be sited to the East of the Beseck substation while the remainder of the undergrounding was located between Devon and Beseck.
 - d. Please explain how the results of the Case-10 analyses would change, if at all, if KEMA assumed that approximately five miles of the additional undergrounding in Cases II-7, II-8, or II-9 were located in the portion of the Phase II project proposed to be sited to the East of the Beseck substation while the remaining 10 miles of the undergrounding was located between Devon and Beseck.