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

DECEMBER 3, 2004

KEMA RESPONSES TO PRE-HEARING QUESTIONS FROM THE CONNECTICUT LIGHT AND POWER COMPANY

Question: (unnumbered – request to the Council)

Provide the load impedances and impedance angles vs. frequency characteristics that were used in the analyses in the KEMA, Inc. report of October 18, 2004?

Response to CL&P Interrogatory, dated December 3, 2004:

KEMA does not have load information in the form requested. KEMA provided active and reactive loads by bus to the PowerFactory program, based on the results of the Applicant's load flow studies provided in response to a data request by the Towns. Using this load information and the results of a converged power flow analysis, the PowerFactory program models the equivalent load at each bus as a shunt-connected branch of parallel resistance, inductance and capacitance. KEMA does not have the associated equivalent impedances, which are calculated internally by the PowerFactory program.