STATE OF CONNECTICUT CONNECTICUT SITING COUNCIL

THE CONNECTICUT LIGHT AND POWER DOCKET NO. 272 COMPANY AND THE UNITED ILLUMINATING COMPANY APPLICATION FOR A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED FOR THE CONSTRUCTION OF A NEW 345-KV ELECTRIC TRANSMISSION LINE AND ASSOCIATED FACILITES BETWEEN THE SCOVILLE ROCK SWITCHING STATION IN MIDDLETOWN AND THE 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 WALLINFORD, EAST DEVON SUBSTATION IN MILFORD, AND SINGER SUBSTATION IN BRIDGEPORT, MODIFICATIONS AT SCOVILL ROCK SWITCHING STATION AND NORWALK SUBSTATION, AND THE RECONFIGURATION OF CERTAIN

PROPOSED FINDINGS OF FACT OF THE TOWN OF ORANGE

MARCH 11, 2005

The Town of Orange (the "Town") submits the following proposed findings of fact in the above-captioned proceeding.

P.A. 04-246

INTERCONNECTIONS

1. In enacting P.A. 04-246, the Legislature determined that high voltage overhead transmission lines pose a health concern.

- 2. Public Act 04-246 requires that buffer zones be established where the facilities identified in the Public Act 04-246 are adjacent to high voltage overhead transmission lines to protect public health and safety form the effects of overhead transmission lines.
 - 3. A Residential area is any area in which one or more homes or facilities in which people reside exists.
 - 4. The determination of what buffer is necessary for the protection of health and safety is a question of fact for the Siting Council.
 - 5. The health concern to be addressed pursuant to PA 04-246 is increased risk of childhood leukemia from exposure to high levels of EMF

Buffers should be established based upon prudent avoidance based upon the exposure risks

- 6. Ideally exposure to EMF should be limited to background levels of EMF and where a buffer can be readily achieved without extraordinary activities such as condemnation of properties should be established.
 - 7. A buffer of 300 feet is necessary to achieve background levels of EMF
- 8. 221 homes, 1 playground, and a community center where children congregate are within 300 feet of the nearest proposed conductor within the Town of Orange.
- 9. Long term exposure to EMF levels above 6 mG are a clear health risk and buffers to avoid such exposure are necessary.
- 10. Given the suggestive positive findings for exposures above 3 or 4 mG in the Greenland and Albohm meta-analyses, the Connecticut Department of Public Health ("DPH") has found that prudent avoidance is warranted in the uncertain zone above 3 mG
- 11. Prudent avoidance does not warrant extraordinary measures such as condemnation of peoples' homes.
- 12. To achieve a buffer having a 3 mG EMF level at its edge at a load of 27.7 GW would result in 50 homes in the Town of Orange being located within the buffer, even with heightened towers and split phasing utilized as mitigation measures.
- 13. At 15 GW loading a buffer containing no homes in the Town of Orange can possibly be achieved with an EMF level of 6 mG at the edge of buffer with 80 foot

towers for the 115kV line and 105 foot towers for the 345 kV line and split phase design and 3 mG with towers 30 feet higher.

- 14. Tower height is matter of significant concern and therefore a factor to be considered in prudent avoidance and must be done on a case by case basis within each community. This is best performed during the D & M phase, with the wishes of each municipality a primary factor.
- 15. EMF levels can be adjusted at specific locations by adjusting tower locations and heights along the right of way.
- 16. The Siting Council lacks the authority to grant the power of eminent domain to the Companies.
- 17. The Companies do not have the power of eminent domain to establish safe buffers for EMF exposure.
- 18. If homes or other Statutory Facilities are within a buffer necessary for public safety the Siting Council must not certify the line.

If split phase design is authorized as a mitigation measure the theoretical results must be proven in field testing as a precondition to construction and/or operation of the line.

- 19. There is no field data demonstrating the extent to which split phasing reduces EMF exposure levels.
- 20. Split phasing as theoretically calculated has a significant impact on EMF levels
- 21. Split phasing at 345kV has never been used as a mitigation measure for the purpose of reducing EMF exposure levels in the U.S.
- 22. The only instance of split phasing being employed to reduce EMF exposure levels is in connection with a 115kV transmission line in western New York.
- 23. The physics of split phasing in canceling magnetic fields is not novel or complicated physics.

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TOWN OF ORANGE	
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CERTIFICATION

This is to certify that on this 11th day of March, 2005, a copy of the foregoing was either mailed, postage prepaid, or e-mailed to each admitted party or intervenor on the service list as of the date hereof.

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