STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

THE CONNECTICUT LIGHT AND POWER 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 INTERCONNECTIONS	:	DOCKET NO. 272 MARCH 11, 2005

PROPOSED FINDINGS OF FACT OF THE TOWN OF WOODBRIDGE

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

The underground route identified by the Town is constructible.

1. On May 25, 2004, the Town of Woodbridge ("Town") submitted to the Applicants a specific underground route, along town roads, including locations for two transition stations in the Town to enable the line to be porpoised. *Letter from David Ball to Anthony Fitzgerald and Linda Randell dated May 25, 2004, admitted into the record as a supplement to the Town's municipal consultation comments.*

2. The route which the Town identified would result in 3.4 miles of undergrounding in Woodbridge. *Tr. 6-15-04 @ 189.*

3. A transition station can be located on the 180 acres of property currently owned by the Regional Water Authority in Southern Woodbridge, which the Town is in the process of purchasing. This property has been designated as Class III property; it is not a part of the RWA watershed, is considered excess land and is not needed for the public water supply. *Letter from David Ball to Anthony Fitzgerald and Linda Randell dated May 25, 2004.*

4. The 3.4 mile underground route can traverse Northerly from Johnson Road, to Pease Road, then East on Route 114, across Route 63, North on Cedar Road or Route 63, until reaching CL&P's property near the intersection of Route 63 and Clark Road, where a second transition station can be constructed. *Letter from David Ball to Anthony Fitzgerald and Linda Randell dated May 25, 2004.*

5. This porpoise configuration will avoid overhead lines at B'Nai Jacob/Ezra Academy and the Jewish Community Center, as well as residential areas protected by P.A. 04-246. *Tr. 6-15-04 @ 191*; *Woodbridge Exhibit ___, entered into Record on 1/20/05. See Tr. 1/20/05 @ 13-16.*

6. This porpoise configuration will avoid environmental impacts to some of the most sensitive wetlands identified in this docket, including Wetland 133, as designated by Land Tech. *Id.*

7. The Applicants concede that this porpoise configuration can be constructed. *Id.*

8. It is possible to use XLPE cables for the 3.4 miles of underground lines, which carry less capacitance than HPFF cables. *Id. @ 191-92.*

9. It is possible to bury both the new 345-kV line and the existing 115-kV line beneath the roads identified for this route, in two separate trenches. *Id. @ 192.*

The underground route identified by the Town is technologically feasible.

10. In its initial Harmonic Impedance Study for Southwest Connecticut Phase II Alternatives dated October 18, 2004 (the "KEMA Report"), KEMA identified mitigation devices that should have been studied, concluding: "[a] combined mitigation solution, using one or two STATCOMs, together with a number of C-Type Filters in place of most large capacitor banks should add excellent harmonic and dynamic voltage performance to the system." *KEMA Report @ p.* 69.

11. The operational complexity of an additional 1-2 STATCOMs would be "greatly reduced," compared to the operation of four additional STATCOMs. *Tr. 12-14-04 @ 94.*

12. The benefit of an additional STATCOM is in providing voltage support. *Tr. 12-14-04 @ 96*.

13. Adding STATCOMs to the system has a positive effect on the temporary overvoltage problem. *Tr. 1-13-05 @ 120*.

14. The ROC Final Report identified temporary overvoltages ("TOV"s) as a potential obstacle to the ability to add underground miles.

15. In its "white paper" critiquing the ROC Report, entitled "Observations on the Reliability and Operability Committee' s Final Report" dated January 18, 2005 (the "KEMA White Paper"), KEMA recommended the use of C-Type Filters as a key mitigation device. *KEMA White Paper @ p. 5*

16. If C-Type Filters are employed as a mitigation device, the TOV problem will be improved. *Tr. 2-17-05 @ 33*.

17. The studies that have been run in this docket using C-Type Filters have confirmed that C-Type Filters will be successful in mitigating TOVs. *Tr. 2-17-05 @ 16-17*.

18. An additional five miles of undergrounding is technically feasible using C-Type Filters. *Tr. 2-17-05 @ 25*.

19. A porpoise configuration does not weaken the system, and in and of itself is not technologically infeasible. *Tr. 2-17-05 @ 29, 31*.

20. Although it may be preferable to extend undergrounding from a substation from an operational point of view, from a resonance and TOV point of view, it is better to porpoise the line to add underground miles. *Tr. 2-17-05 @ 41*.

Calculated EMF levels at Ezra Academy and the Jewish Community Center are Unacceptable

21. If split phasing works as represented by the Applicants, and 135' overhead towers are constructed, for the 27.7 GW case:

- the EMF exposure levels at Ezra Academy within the right of way ("ROW") are as high as 21.9mG.
- at the edges of the ROW at Ezra Academy / B' Nai Jacob, the EMF exposure levels are 6.0mG and 10.4mG.
- at Ezra Academy's building, the EMF exposure level is 4.6mG.

- 30 feet from the southeast corner of the ROW at Ezra Academy / B' Nai Jacob, which would place one inside the school itself, the EMF exposure level is 3.6mG.

- it is not until one proceeds 45' from the edge of the ROW (deeper into the school building at Ezra Academy) that a calculation below 3.0mG is achieved, and it is not until one is 75' from the ROW that an EMF calculation below 2mG is achieved.

22. If split phasing works as represented by the Applicants, and 135' overhead towers are constructed, for the 27.7 GW case:

- the EMF exposure levels at the Jewish Community Center within the ROW are as high as 17.3mG.

- at the edges of the ROW at the Jewish Community Center, the EMF exposure levels are 3.8 mG and 10.3 mG.

- it is not until one proceeds 90' from the northwest edge of the ROW at the Jewish Community Center that a calculation below 3.0mG is achieved, and it is not until one is 135' from the northwest edge of the ROW that an EMF calculation below 2mG is achieved.

- from the southeast edge of the ROW at the Jewish Community Center, an EMF calculation below 3mG is reached 30' from the ROW, and below 2mG is reached 60' away.

EMF levels at Woodbridge Residential Areas

23. A buffer zone based on the 27.7 GW case and a threshold EMF exposure level of 3mG would significantly impact 24 residential properties. *Woodbridge Exhibit ___, entered into Record on 1/20/05. See Tr. 1/20/05 @ 13-16.*

A 3.4 mile porpoise configuration will avoid impacts to sensitive environmental resources in the Town of Woodbridge

24. Of the 6.2 mile length of ROW in Woodbridge, approximately 2.7 miles of the length of the ROW has wetlands. *Tr. 6-3-04 @ 230.*

25. The 3.4 mile porpoise configuration will avoid impacts to sensitive environmental resources in Woodbridge, including Wetland 133, 4 vernal pools, and an eastern box turtle habitat. The underground porpoise route proposed by Woodbridge is outside of the RWA's watershed area. *Tr. 6-3-04 @ 142.*

26. The following significant natural resource areas exist in the Town as identified by Land-Tech Consultant, Inc. ("Land-Tech"):

- Wetland 133. This wetland is the largest wetland within the ROW in Woodbridge. The wetland extends for 8/10 mile along the ROW. *Tr. 6-3-04 @ 227*. The wetland system contains Race Brook which is a DEP stocked trout stream, possesses a large flood plain area capable of attenuating storm flows from Race Brook, and contains a large diverse mosaic of vegetative community types and wildlife habitat. *Woodbridge Ex. 6*

- Wetland 133 also contains two vernal pools, in which wood frog egg masses were identified. *Id*.

- Three other vernal pools are located in wetlands 124, 130, and 138, respectively. In addition, an amphibian breeding pool is located in wetland 122. *Id*.

- The Glen Dam Reservoir is part of a public water supply and the associated area support the State Species of Special Concern Red-shouldered Hawk. *Id*.

- Two box turtle habitats. *Id*.

27. If the project is constructed overhead in Woodbridge, significant long and short term impacts to sensitive natural resources will occur. *Woodbridge Exhibit 6, Executive Summary.*

28. If the project is constructed overhead in Woodbridge, there will be approximately 7.3 acres of temporary wetland disturbance and 4.3 acres of wetland fill in Woodbridge alone. *Id*.

29. The Applicants have provided no information on environmental impacts, including wetland disturbance, if 135' towers are constructed overhead in the Town.

30. The installation of an underground line in the Town will not significantly impact wildlife along the route, as minimal alteration to vegetation is required. Access roads and pole installations would not be required. The only impact to the environment would be a narrow trench that will be placed beneath the existing roads. *Woodbridge Exhibit 6, page 12*.

31. The Applicants have provided no viewshed analysis, if 135' towers are constructed overhead in the Town.

32. If the project is constructed overhead in Woodbridge, and 135' towers are constructed in the Town, more than 100 towers will be significantly above the treeline, while the original proposal had the towers at or just above the treeline.

33. The Applicants have failed to provide an updated cultural resources assessment showing the impact of 135' towers on the historic resources in Woodbridge, including the Thomas Darling House, and the New England Cement Co. Kiln and Quarry, both listed on the Natural Register of Historic Places.

34. The record is devoid of any comments from the Connecticut Historical Commission concerning the impacts of 135' overhead towers.

Respectfully submitted,

TOWN OF WOODBRIDGE

By:_____

David A. Ball, Esq.
Monte E. Frank, Esq.
Cohen and Wolf, P.C.
1115 Broad Street
Bridgeport, CT 06604
(203) 368-0211