STATE OF CONNECTICUT

SITING COUNCIL

Re:	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 Facilities Between Scovill Rock Switching Station in Middletown and Norwalk Substation in Norwalk, Connecticut Including the Reconstruction of Portions of Existing 115-kV and 345-kV Electric Transmission Lines, the Construction of the 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 272 June 2, 2004

ERRATA PAGES FOR CHANGES READ INTO THE RECORD BY APPLICANTS' WITNESSES DURING THE HEARING ON JUNE 1 AND JUNE 2, 2004

The Connecticut Light and Power Company ("CL&P") and The United Illuminating Company ("UI") (together, the "Companies") submit the attached errata pages to document corrections to the pre-filed testimony of the Companies' witness. These corrections were read into the record by the Companies witnesses during the Connecticut Siting Council ("Council") hearing held in this docket on June 1 and June 2, 2004.

Errata Pages

Correction to the line overloads information on page 7 of the Testimony of Roger Zaklukiewicz, Anne Bartosewicz, John Prete, Cyril Welter, And James Hogan Regarding the East Shore Route

Corrections to Testimony Of Roger Zaklukiewicz, Anne Bartosewicz, John Prete, Richard Reed, James Hogan, Cyril Wetler, and Louise Mango Regarding Routing and

Environmental Matters Concerning The Portion Of The Middletown To Norwalk Project Between Scovill Rock Switching Station and East Devon Substation (Segments 1 & 2) as follows

- Clarification of the description of the northerly route on page 3
- Correction of the land owner on page 8
- Correction of two acreage numbers and clarification of the ROW expansion needed between Chestnut Junction and Black Pond Junction on page 15
- Replacement of the comparison table on page 17 to provide additional and corrected information

Respectfully Submitted,

Applicants,

The Connecticut Light and Power Company

By: Anne Bartosewicz
Project Director, CL&P

The United Illuminating Company

By: John J. Prete
Project Director, UI

cc: Service List

> the power supply into SWCT by introducing a new source; it simply connects the load in SWCT to an already heavily loaded 387 line. The most notable overload in this report is the one on the 387 line. Even with the assumed reconductoring of the limiting portions of the 387 line, the line continues to overload. In addition, an outage of this line yields substantial overloads on the remaining corridors serving SWCT and the 345-kV across the state. (See CL&P/UI Exhibit 21, Addenda #3 to the Supplemental Filing dated February 23, 2004, Working Group Comparison Study, p. 13)

Therefore, even if the existing 387 line were reconductored, compliance with national and regional reliability criteria would not be achievable (regardless of the size of the replacement conductor) because any East Shore Route that uses the existing 387 line as a component would not build a new source into SWCT. As a result, the loss of the 387 line would result in post-contingency overloads elsewhere on the transmission system. This analysis also showed that other transmission lines would experience overloads, including overloads on the following lines:

- **329 Line between Southington and Frost Bridge S/S (345-kV; 12.7 miles);**
- 318/362 Line between Southington S/S and Meriden S/S (345-kV; 3.9 miles);
- 1342 Line between Bokum S/S and Green Hill S/S (115-kV; 11.3 miles);
- 1610 Line between Glen Lake Junction and Southington S/S (115-kV; 18.3 miles);
- 1610 Line between Mix Avenue S/S and Glen Lake Junction (115-kV; 2.9 miles);

The additional studies performed by PowerGEM and the ISO-NE SWCT Working Group thus confirmed the Companies' original determination that any East Shore Route would require the construction of a second 345-kV line between Beseck and East Shore in order to satisfy national and regional reliability criteria.

Q. Once the Companies determined that national and regional reliability criteria require that a second 345-kV line must be constructed as part of any East Shore Route, did you review potential East Shore Routes for the installation of this new 345-kV line?

new Beseck Switching Station in Wallingford and thence to the new East Devon Substation in Milford. In addition, certain of the municipalities along the proposed route requested that the Companies review a routing option for the northern portion of Segment 1 (referred to herein as the "Northerly Route") that would traverse between Chestnut Junction and Black Pond Junction **to the proposed Beseck Switching Station**. Likewise, during the April 2004 hearings, the Siting Council asked the Companies whether a new switching station could be developed at Black Pond Junction (in Meriden), rather than at Beseck (Wallingford), as proposed. The testimony summarizes the results of the Companies' review of both of these suggestions.

The testimony also describes how the avoidance or minimization of environmental effects were considered in identifying the proposed route, and will continue to be important as the Project design, certification, permitting, and construction proceed. Environmental matters regarding the proposed Beseck Switching Station also are reviewed.

Eight primary topics are discussed, as listed below. The first four topics pertain to routing matters, while the latter four relate principally to environmental issues.

Routing:

1. General location of Segments 1 and 2, including the supported route change in Cheshire (identified in the Companies' Siting Council Application).
2. Summary review of routing criteria for Segments 1 and 2.
3. Discussion of the Northerly Route.
4. Discussion of Black Pond Junction as an alternative to the development of a new switching station location at Beseck.

Q. Is the Segment 1 area between Scovill Rock Switching Station and Chestnut Junction the only location where additional ROW easements would have to be acquired for the overhead transmission line?

A. Yes. Approximately 9.5 acres of new easement would have to be acquired from private landowners in this area. Along the rest of the route between Scovill Rock and Chestnut Junction, the additional ROW expansion would be on lands owned by **CL&P.**

Q. Do the Companies support any changes to the proposed route in Segments 1 or 2?

A. Yes. The Companies have supported one change in Segment 2. This change was identified during the Municipal Consultation Process for the Project and is described in the Application (refer to Section I.1) and depicted on the Volume 11 Map Segments (Nos. 80-83). The supported change would involve a minor modification to minimize impacts to a residential subdivision in Cheshire. It would entail the removal of one of the existing 115-kV overhead circuits (Circuit 1640) from the existing ROW to accommodate the proposed 345-kV facilities and the remaining 115-kV line (Circuit 1208) on a single structure. The 115-kV line that would be removed would be rebuilt underground, using cross-linked polyethylene ("XLPE") cable.

Q. Where would the underground 115-kV line be located and how long would it be?

A. The line would be approximately 4,900 feet in length, and would be installed primarily within two local roads (Old Farms Road and Old Lane Road in Cheshire). The beginning and end of the underground segment would be buried for short

would require the expansion of the existing ROW up to 80 feet, require ROW clearing of up to **47** acres and the acquisition of up to eight residences.

Q. What are the possible structure configurations?

A. With many public concerns being voiced about the aesthetic impacts of overhead transmission structures, the Companies investigated expanding the existing ROW and constructing the new 345-kV transmission facilities on steel H-Frame structures similar in height and appearance to the wood H-Frame structures already in place between Chestnut Junction and Black Pond Junction. This configuration requires for the ROW to be expanded by 80 feet, would have no overall increase in the structure height in the area, but would require the expansion of the ROW by approximately **75** acres. Much of this land is not currently owned by Northeast Utilities and would have to be acquired from private, municipal, and state landowners. This is Configuration A.

Configuration B provides the opportunity to construct a new 345-kV transmission line with less expansion of the ROW as well as preserving the existing facilities. This configuration calls for constructing the new 345-kV transmission line in a vertical configuration on steel monopoles typically 130 feet tall in a vertical configuration. The ROW would have to be expanded by 40 feet between Chestnut Junction and Black Pond Junction. The total amount of ROW expansion would be approximately 38 acres. Much of this property is not currently owned by Northeast Utilities and would have to be acquired from private, municipal and state landowners. This configuration reduces the amount of property affected; however, it increases the overall structure height in the area.

existing transmission lines. The project schedule and the total project cost will be severely affected by trying to schedule those outages if this design is utilized. As an example, a recent project in this corridor to replace structures required an outage that lasted four days on the 348 line between Millstone Generating Station and the Southington Substation resulting in uplift costs in excess of $600,000. This type of major capital expenditure seriously affects the cost of any project requiring outages of major transmission lines.

The following table helps to compare the differences between the proposed route and the Northerly Route:

	Northerly Route - Configuration			Proposed Route
	A (H-Frame)	B (Monopole)	C (Monopole)	(Composite Monopole)
Circuit Length (miles)	10.5	10.5	25.9*	7.0
ROW Width Increase (feet) Chestnut to Black Pond	80	40	0	0
ROW Width Increase (feet) Black Pond to E. Meriden Jct.	**20**	**20**	**20**	**0**
Structure Height (feet)	90	130	130	105
ROW Increase (acres) Chestnut to Black Pond	**75**	**38**	**0**	**0**
ROW Increase (acres) Black Pond to E. Meriden Jct	**3**	**3**	**3**	**0**
Home Acquisitions	8	4	0	0
Cost (not including uplift)	$24.5M	24.9M	70.3M	$22.9M
Reliability	Less Reliable			More Reliable

* Configuration C requires the existing three sets of 345-kV H-Frames between Chestnut Jct. and Black Pond Jct. to be removed and replaced with 130' monopole structures.

4. DISCUSSION OF BLACK POND JUNCTION AS AN ALTERNATIVE SITE FOR THE PROPOSED BESECK SWITCHING STATION

Q. At the April 2004 hearings, the Siting Council requested that the Companies provide additional information concerning why Beseck (in Wallingford), and not Black Pond Junction (in Meriden, adjacent to the Middlefield boundary), was selected as a site for the new switching station. Have you conducted such reviews?