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 November 4, 2004

FIRST SET OF INTERROGATORIES
OF THE CONNECTICUT LIGHT AND POWER COMPANY
AND
THE UNITED ILLUMINATING COMPANY DIRECTED TO ABB

The Connecticut Light and Power Company and The United Illuminating Company hereby request that ABB respond to the following interrogatories on or before November 15, 2004.

DEFINITIONS:

A. "Any" shall include "all," and "all" shall include "any," as needed to make the request inclusive and not exclusive.

B. "And" shall include "or," and "or" shall include "and," as needed to make the request inclusive and not exclusive. For example, both "and" and "or" mean "and/or."

C. "Include" and "including" mean "including but not limited to."

D. "The ABB October Report" refers to two companion reports prepared by ABB: (i) a technical feasibility report entitled "Middletown-Norwalk Transmission Project Technical Description of VSC HVDC Converter and Cable Technology"; and (ii) a non-technical report entitled "Middletown-Norwalk Transmission Project VSC HVDC System Feasibility Study."

INTERROGATORIES

1. Please confirm that the largest installation of voltage source converter high voltage direct current transmission (VSC-HVDC) in operation at the present time is 352 MW.

2. ABB's short-circuit analysis indicates that series reactors would be needed between Bridgeport Harbor Unit 3 and the Pequonnock 115-kV bus to avoid short-circuit duty at Pequonnock from exceeding equipment ratings. Were these series reactors included in ABB's stability simulations?

3. Were the reactors modeled in the short circuit study considered in the powerflow study?

4. Were the reactors modeled in the short circuit study considered in the frequency scan study?

5. In ABB's powerflow study, there are a number of overloads that are to be removed through adjustment of the HVDC. Provide all documentation of studies performed by ABB to demonstrate that there would be an HVDC setting for each converter that removes the overloads.

6. Please provide a curve of voltage versus time that shows the ability of VSC-HVDC converters to "ride through" low voltage events.

7. Was the low voltage blocking of the HVDC terminals modeled? If so, provide all documentation of the modeling, including inputs, assumptions and results.

8. Please specify the length of cable that can reasonably fit on a reel and be transported over public roads to the installation site:

(a) for a 330 MW installation;

(b) for a 530 MW installation.

9. The ABB October Report recommends filling the cable conduits with a bentonite slurry. Please describe any actual experience with such an installation.

10. How will VSC-HVDC compensate for the loss of reactive power flow during a system contingency such as the loss of an alternating current ("ac") line?

11. ABB states in the short circuit study included in the ABB October Report that VSC-HVDC does not contribute to the fault current and hence the model assumed zero contribution from the direct current ("dc") system. However, the technical paper included in the ABB October Report has demonstrated that there would be fault current contribution from VSC-HVDC depending on the fault location and the control mode. Please clarify the reason for the study assumption and whether the study modeled the effect of VSC-HVDC performance under different control modes.

12. Please provide statistics for outages and for reductions in rated capability for the existing commercially operating VSC-HVDC systems. In addition, please indicate the causes and duration of each of these outages and reductions in rated capability.

13. Has ABB performed type and pre-qualification tests for:

(a) the cables proposed to be used with the 530 MW converters where the cables are to be installed in duct banks?

(b) the splices to be used with the cables proposed to be used with the 530 MW converters where the splices are installed in vaults below the surface?

(c) the integrated cable system proposed to be used with the 530 MW converters in a duct bank?

14. Please provide the ampacity calculation performed for the proposed cable size and duct bank configurations.

15. Please provide the overall system losses, broken down separately by converter station losses and line losses, as a percentage of rated power for each of the three options proposed in the ABB October Report, at 0%, 10%, 50%, and 100% of load.

16. Provide a detailed itemization and description of estimated costs for each of the three options proposed in the ABB October Report. Include the following in your cost estimates:

- labor
- material
- equipment
- overhead
- real property acquisition
- all applicable taxes
- contingency costs
- unit prices and amounts
- any other components of your cost estimates.

THE CONNECTICUT LIGHT AND POWER COMPANY

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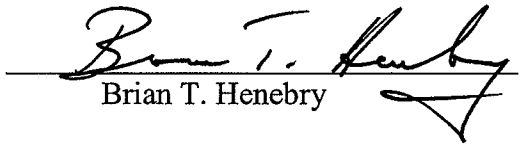
CERTIFICATION

This is to certify that on this 4th day of November, 2004, an original and twenty (20) copies of the foregoing were delivered by hand to the Connecticut Siting Council, 10 Franklin Square, New Britain, CT 06051, and a copy of the foregoing was mailed, postage prepaid, to all parties and intervenors. Electronic copies of the foregoing were also sent to the Connecticut Siting Council and all parties and intervenors.



Brian T. Henebry