

STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051 Phone: (860) 827-2935 Fax: (860) 827-2950 E-Mail: siting.council@ct.gov www.ct.gov/csc

CERTIFIED MAIL RETURN RECEIPT REQUESTED

August 16, 2011

John R. Morissette Northeast Utilities Service Company P.O. Box 270 Hartford, CT 06141-0270

RE: **PETITION NO. 1000** - The Connecticut Light and Power Company petition for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for all transmission remediation activities pursuant to the North American Electric Reliability Corporation (NERC) facility ratings recommendation to industry.

Dear Mr. Morissette:

At a public meeting held on August 11, 2011, the Connecticut Siting Council (Council) considered and ruled that this proposal would not have a substantial adverse environmental effect, and pursuant to General Statutes § 16-50k, would not require a Certificate of Environmental Compatibility and Public Need. This proposal is approved subject to the following conditions:

- 1. CL&P shall file with the Council a sub-petition for each site-specific remediation activity for Council staff review that includes the following information:
 - a. The exact location of the remediation activity;
 - Description of the remediation activity, including, but not limited to site drawings and plans depicting current field conditions, corrected field conditions and access routes to areas of remediation activities;
 - c. An impact statement relating to the potential environmental effects of construction as follows, where applicable:
 - i. Wetlands and watercourses
 - ii. Flood zones
 - iii. DEP Natural Diversity Database areas
 - iv. Clearing of trees and/or vegetation
 - d. A mitigation plan for any identified environmental impact, including, but not limited to best management practices, erosion and sediment controls, re-vegetation and site stabilization.
- 2. CL&P shall provide notice to the town(s) and abutting property owners of the proposed remediation activity with a copy of the site-specific sub-petition indicating that comments or concerns should be submitted to the Council within 30 days of the date that the sub-petition is sent to the town(s) and abutting property owners. Proof of such notice shall be provided to the Council at the time the site-specific sub-petition is filed with the Council.



This decision is under the exclusive jurisdiction of the Council. The Council shall have discretion to request additional information, conduct field reviews, deliberate during a regular meeting, or hold a public hearing on any site-specific sub-petition that is filed. All work is to be implemented in accordance with the October 7, 2010 NERC Facility Ratings Alert as specified in the petition, dated July 6, 2011.

Enclosed for your information is a copy of the staff report on this petition.

Very truly yours,

Robert Stein W

Chairman

RS/MP/laf

Enclosure: Staff Report dated August 11, 2011

Petition No. 1000 The Connecticut Light and Power Company Statewide Staff Report August 11, 2011

On July 6, 2011, the Connecticut Siting Council (Council) received a Petition (Petition) from The Connecticut Light and Power Company (CL&P) for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the proposed transmission remediation activities to comply with the North American Electric Reliability Corporation (NERC) facility ratings recommendation to industry. Specifically, on October 7, 2010, NERC issued a nationwide alert to the bulk power industry of possible discrepancies between the design of transmission facilities and actual field conditions that require immediate attention. NERC recommended that the utilities assess transmission lines to confirm that the facility ratings were being determined based on actual field conditions and that any difference between design and actual field conditions is within the tolerances defined by the facility rating methodology.

Transmission lines have a thermal rating in order to protect the line from overheating under excessive load. As the line loading increases, the heat causes the conductors to expand in length and increase sag. This can lead to clearance issues if obstacles are in the way of the conductors or the actual line clearance is less than predicted. CL&P's evaluation will determine if any height/clearance issues prevent the lines from reaching their design thermal rating. If they do, this could be a NERC reliability issue since the line's rating may be reduced. CL&P would seek corrective action.

To comply with the NERC recommendation, CL&P plans to:

- Review as-build transmission line clearances on 345-kV, 115-kV and portions of the 69-kV system. Light detection and ranging technology (LiDAR) will be employed to measure the distances to the existing ground profile and other objects within the right-of-way (ROW);
- Utilize computer modeling to graphically translate the LiDAR data:
- Identify and evaluate any clearance "points of interest" for potential impact on the transmission line thermal rating;
- Remediate all clearance issues that adversely affect a line's ability to achieve its designed thermal rating;
- Work with customers to address encroachments or other ROW modifications that have occurred within its easements or property;
- File status reports twice per year with NERC on its findings and progress.

CL&P plans to have the field clearance assessments of the 345-kV lines completed by year-end 2011. The assessment of the 115-kV and 69-kV lines would be completed by year-end 2012. Remediation activities would be completed within one year of identification of a clearance issue. The remediation activities would include taking measures to prohibit access to the area(s) of concern until the remediation is complete, clear soil or re-grade to improve clearances, increase tension on the line(s) to eliminate or reduce sag, replace an existing structure to increase the height of the conductors, and/or install an intermediate structure to reduce the conductor span sag.

The remediation activities are not expected to have a substantial adverse environmental effect. No new ROW would be required. Any effects to wetlands/watercourses would be temporary. Proper erosion and sedimentation controls would be employed. Existing access routes would be utilized. Tree and vegetation clearing would be kept to a minimum. Electric and magnetic fields (EMF) would decrease in areas where conductor heights above ground are increased. Changes to EMF off of the ROW would be negligible.