



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@po.state.ct.us

www.ct.gov/csc

**CERTIFIED MAIL
RETURN RECEIPT REQUESTED**

March 17, 2006

Anne Bartosewicz
Project Director
Northeast Utilities Service Company
P.O. Box 270
Hartford, CT 06141-0270

RE: **DOCKET NO. 272** - The Connecticut Light and Power Company and The United Illuminating Company 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. **Development and Management Plan for Segment 1a (Scovill Rock to Chestnut Jct/ Oxbow Jct to Beseck Switching Station/Black Pond Jct to Beseck Switching Station not including Royal Oak)**

Dear Ms. Bartosewicz:

At a public meeting held on March 8, 2006, the Connecticut Siting Council (Council) considered and conditionally approved the Development and Management (D&M) Plan for Segment 1a (Scovill Rock to Chestnut Jct/ Oxbow Jct to Beseck Switching Station/Black Pond Jct to Beseck Switching Station not including Royal Oak) with the following conditions:

- That CL&P provide two weeks advance notice prior to commencement of construction.
- That CL&P provide quarterly construction reports noting milestones of construction activity, including spill reports.
- That CL&P provide a weekly Environmental Inspector's report.
- That the location of the contractor's yard and staging areas be identified and provided to the Council prior to use.
- That lay down or pulling station sites be provided prior to commencement of construction and such locations not be located within 50 feet of the edge of a wetland or water body.
- That CL&P utilize a professional forester to oversee clearing activities consistent with BMP.
- That CL&P conduct a comprehensive walk-over (sweeps) to remove turtles prior to each day's construction activity in the Ball Brook area.

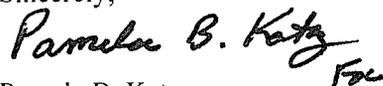
- That the placement of construction fencing be no less than 25 feet to the vernal pool and placement of erosion and sediment controls be placed down slope of construction fencing in vicinity to structure #3565.
- That best management practices for fueling, operation, and maintenance of vehicles in aquifer zones and inland wetland and watercourses be employed.
- That the temporary bridges and construction mats and associated material used throughout Segment 1a be removed upon completion of construction.
- That CL&P provide an annual report for three years following ROW construction on the reestablishment of native vegetation to inland wetland and the control and management of invasive plant species.
- That CL&P notify the Council of workday and/or work hour extensions verbally and documented within 24 hours of a business day.
- That CL&P notify landowners adjacent to the right-of way not less than 48 hours prior to the initiation of construction.
- That CL&P provide a blasting plan, if necessary, for review and approval prior to blasting.
- That the D&M plans for erosion and sediment controls comply with the 2002 Connecticut Guidelines for Erosion and Sediment Control.
- That CL&P provide archeological reconnaissance surveys for review and approval.
- That proposed deviations are authorized by the Chairman with written specification of the deviation submitted within 24 hours of a business day and all other changes require advance notification and Council approval or be subject to enforcement by the Attorney General.

This approval applies only to the D&M Plan submitted on December 22, 2005, and responses to interrogatories dated February 14, 15, 16, and 21, 2006. Enclosed for your information is the staff report dated March 8, 2006.

Any deviation from the D&M plans may result in the Council implementing enforcement proceedings pursuant to General Statutes § 16-50u including, without limitation, imposition of expenses resulting from such failure and of civil penalties in an amount not less than one thousand dollars per day for each day of construction or operation in material violation.

Please feel free to call S. Derek Phelps, Executive Director if you have any questions.

Sincerely,



Pamela B. Katz
Chairman

PBK/SDP/foc

Enclosure

c: Council Members
Parties and Intervenors



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@po.state.ct.us

www.ct.gov/csc

Docket No. 272

Connecticut Light and Power Company

Segment 1a

Scovill Rock to Chestnut Junction

Oxbow Junction to Beseck Switching Station (excluding Royal Oak bypass)

Black Pond Junction to Beseck Switching Station

On December 22, 2005 Connecticut Light and Power Company (CL&P) submitted a Development and Management (D&M) Plan for overhead transmission lines in Segment 1a - Scovill Rock to Chestnut Junction, traverses Middletown; Oxbow Junction to Beseck Switching Station (excluding Royal Oak bypass), traverses Middletown, Durham, Middlefield, and Wallingford; and Black Pond Junction, to Beseck Switching Station are located in Meriden Wallingford, respectively.

CL&P consulted with officials and residents of all six (6) Segment 1a municipalities – Middletown, Meriden, Haddam, Durham, Middlefield and Wallingford - as well as representatives of the Lyman Orchards Golf Club in Middlefield. Commonwealth Associates, an independent Technical Advisor selected after consultation with Connecticut's Office of Consumer Counsel, was available to assist residents and municipal officials with their requests.

Pursuant to Connecticut General Statutes §16- 243, CL&P must file a *Method and Manner of Construction* with the Connecticut Department of Public Utility Control and associated Department regulations. The Project is also subject to a permit from the U.S. Army Corps of Engineers.

The D&M Plan and alignment maps (at a scale of 1" = 200'), including right-of-way and structure profiles, outlines the route of a new overhead 345-kV transmission line.

From Scovill Rock Switching Station to Chestnut Junction (2.6 miles long) there are currently two 345-kV circuits within the ROW, each supported on wood-pole H-frame structures with a typical height of 80 feet. There are no 115-kV line components in this sub-segment. The structures for the new 345-kV line will be a compact delta design with a typical height of 85 feet. Construction and installation of the new circuit will require a widening of the existing ROW southerly by 55 feet. Much of this widening will be on land already owned by CL&P and nine (9) private landowners.

From Oxbow Junction to the location of the new Beseck Switching Station, the two lines of existing 115-kV wood-pole H-frame structures (typical height of 57 feet) will be removed and replaced with a double-circuit self-supporting steel monopoles supporting both a 345/115-kV line at a typical height of 135 feet. No additional ROW will be required. The transition to the Royal Oak By-pass will shift one structure west to minimize impact to the Wilson property. Structure Nos. 24503A and B on top of Mount Beseck will shift 60 feet east away from the ridge and increase in height by 15 feet and structure nos. 24472 and 9400A at Black Pond Jct will shift 30 south. These changes are due to constructability constraints.

In the Royal Oak neighborhood the existing structures and conductors will remain and only short section of access road would be cleared for the purpose of splicing the new conductor to existing conductor. The splicing of a new conductor to an older conductor would comply with National Electric Code.

Residents in Durham and Wallingford raised concerns and requests to move structures within the ROW and within newly offered ROWs, structure heights, and landscaping. The D&M Plan reflects many iterations maximizing location and height of structures to reduce electric and magnetic fields consistent with the Council's Decision and Order. Wetlands, roadways, railroad ROW, golf course restrictions, and attempts to reduce views cape affected how the structures were located. Furthermore, when dealing with conflicting requests of structure heights CL&P defaulted to the low-EMF design. CL&P does not landscape around or in vicinity of the transmission line structures, CL&P does not object to property owners to landscape as long as the plantings are not within 25 feet of a structure or five feet of a guy and said plantings would not mature above a particular height.

From Black Pond Junction to the Policeman's Benevolent Association property (approximately three spans), the existing 130-foot steel monopole structures will be relocated approximately 20 feet to the west and continue to carry the existing 345-kV circuit 387. Additionally, two new lines of steel monopoles having a typical height of 130 feet will be installed in the existing ROW. Each new structure will support a single 345-kV circuit. The length of this section is approximately 0.45 miles. From the Policeman's Benevolent Association to East Meriden Substation, the existing line of 130-foot steel monopole structures will remain, but the arms will be relocated from the west to the east side of the existing structures. Two new lines of steel monopoles, also with typical heights of 130 feet, will be installed in the existing ROW. Each new structure will support a single 345-kV circuit. The length of this section is approximately 0.9 miles. No additional ROW is required. From the East Meriden Substation south to the proposed Beseck Switching Station, two new lines of 345/115-kV on 130-foot steel monopole structures will be installed. The existing line of 130-foot double circuit monopoles will remain. The existing wood-pole H-frame line circuit 1466 will be removed between East Meriden Substation and Carpenter Lane Junction and the 115-kV circuit will be relocated on one of the two new lines of 345/115-kV structures. The length of this section is 1.45 miles. No additional ROW will be required. The existing steel monopoles carrying the 345-kV circuit 387 between the East Meriden Substation and Carpenter Lane Junction also carry the 115-kV circuit 1975. The new configuration removes the easterly arms that currently carry the 387 circuit and moves the 387 circuit to the westerly arms that currently carry the 1975 circuit. The 1975 circuit will be moved to the second line of new steel monopole structures that will also carry one 345-kV circuit.

Project administration is overseen by CL&P. CL&P's construction contractor will establish a contractor's yard for office trailers, staging of equipment, materials and supplies, and a parking area for construction workers. This contractor's yard will be about two to five acres in size and located proximal to the project. Where possible, material storage, staging and lay down areas will be set up on property already owned by NU. If NU property is not available, areas such as parking lots or land that is not in use as identified in Volume 1, Section K (Proposed Construction Areas) of the Docket No.272 Certificate application would be used (i.e. two locations in Middletown and six locations in Wallingford). Council staff recommends that the contractor's yard and staging areas be identified and provided to the Council prior to use.

The D&M Plan specifically outlines the methods of construction and guidelines for clearing, (permanent and temporary) access roads, foundation excavation, soil erosion and sedimentation control, dewatering, spoil placement, and restoration of disturbed areas to pre-construction conditions. Blasting is not expected however if blasting is necessary CL&P would submit a Blasting plan to the Council for review and approval.

Construction of the overhead transmission lines requires use of existing access roads and construction of (permanent and temporary) access roads both to widths of 15 feet. CL&P would install crushed stone, gravel and or timber mat as a base for access roads. Steel poles ranging in height from 95 feet to 195 feet would require reinforced concrete foundations ranging from 6 feet to 8 feet in diameter. Structure and foundation construction would require a 25-foot cleared area to drill foundation holes in to the ground or into rock. . Excavated material would be used to improve grade around the structures in upland areas; to improve designated construction access roads; and/or deposited as directed by the landowner but not in a wetland. Soil excavated in wetlands would be stored in upland areas reserved for wetlands restoration. Other excess material would be removed and disposed in accordance with state and/or federal regulations. Excavations may require dewatering as a result of storm water or groundwater. Dewatering shall consist of a 10 ft by 10 ft straw bale perimeter (size adjusted per water volume; be located on a fairly level upland that is well vegetated, to allow water to drain and not to discharge into a wetland or water body. No lay down or pulling station sites have been identified and Council staff would recommend such locations not be located within 50 feet of the edge of a wetland or water body and be provided prior to commencement of construction.

Clearing will occur along two portions of the ROW: Scovill Rock Switching Station to Chestnut Junction and Black Pond Junction to Beseck Switching Station. The construction clearing practices include use of a buffer 50-foot for wetlands and 100 feet for watercourses. Approximately 55 feet of clearing width will be required from Scovill Rock Switching Station to Chestnut Junction along the expanded portion of the new ROW to the south of the existing ROW. The first three spans south of Black Pond Junction require 105 feet of clearing width, 35 feet on the east side and 70 feet on the west side. The remainder of the East Meriden to Black Pond Junction sub-segment requires a clearing width of 125 feet, 20 feet along the eastern edge of the ROW and 105 feet along the western edge. The Beseck Switching Station to East Meriden Substation portion of Beseck Switching Station to Black Pond Junction sub-segment requires a 55 foot width of clearing along the eastern edge of the ROW.

For clearing activities and to maximize forest resources CL&P will employ a professional forestry consulting firm to inventory trees on the properties affected by ROW widening during construction. Most of the marketable timber to be removed is on NU property in Middletown. In some cases, CL&P will work with private landowners to determine the uses of forest resources.

Low-impact tree clearing is the preferred method for clearing which incorporates a variety of approaches, techniques and equipment to minimize site disturbance and to protect residual forests, wetlands, watercourses, soils and cultural resources, including stone walls, old cemeteries and old foundations that are commonly found in wooded areas in Connecticut. Primarily, CL&P would follow the Best Management Practices (BMP) for harvesting as outlined in *Logging and Water Quality in Connecticut* – developed by the Connecticut 208 Forestry Advisory Committee, 1982. Council staff recommends CL&P utilize a professional forester to oversee clearing activities consistent with BMP.

Environmentally sensitive areas include Ball Brook, where the wood turtle can be found, and from Wetland Number 15 to Wetland Number 17. Both of these areas are in the City of Middletown. The Durham Meadows Wildlife Management Area in Durham may provide nesting habitat for King rail and Blue winged teal.

DEP requests construction in vicinity of Durham Meadows WMA not occur from April 1 to July 31 in which CL&P would comply. For the area of Ball Brook DEP requests construction not occur from April 1 to November 1. While this may add tension in the construction schedule; as an alternative CL&P would provide training of recognition and removal of the wood turtle. Council staff recommends that CL&P conduct comprehensive walk-over (sweeps) to remove turtles prior to each day's construction activity in the Ball Brook area.

A potential vernal pool is located in Durham, west of Johnson Lane, near existing structure #3564. This area will be fenced with orange safety fence and will be noted as restricted access for construction purposes. Staff recommends the placement of the construction fencing be no less than 25 feet to the vernal pool and placement of erosion and sediment controls be placed down slope of construction fencing.

In addition two sensitive drinking water resources, the Sumner Brook Aquifer in Durham and the McKenzie Watershed Protection Zone in Wallingford, are in the Beseck Switching Station to Black Pond Junction sub-segment. Council staff recommends that best management practices for fueling, operation, and maintenance of vehicles in aquifer zones and inland wetland and watercourses be employed.

Special procedures have been developed for stream and inland wetland crossings, electric utility crossings, noise sensitive receptors, fugitive particulate emissions, dust and mud control, management of solid and/or hazardous substances, protection of cultural and historic resources including an unanticipated discoveries plan, visual impact and residential mitigation plan, and worksite safety plan.

Water crossing methods that may be used during construction include flume pipe with crushed rock ramp, temporary bridge, wooden construction mats and stone fords. Typically work in these resource areas are done during periods of low flow which occur in the summer months of June through September and the winter months of January through March. Also, gaps have been designed into the access roads to provide additional protection to water and/or wetland crossings. These gaps are identified on the drawings as "Restricted Access."

There are two unique locations in Segment 1a where water crossing techniques may require specialized approaches. The first is located east of the Coginchaug River near existing structures #3592 and #4510 and new structure #24521 in the Oxbow Junction to Beseck Switching Station sub-segment. The only access to these structures is from Durham Road to the east. If these two streams are crossed, construction of temporary bridges for access will be required. The other locale is the portion of the Beseck Switching Station to Black Pond Junction sub segment from the East Meriden Substation to Route 66. In this portion of the route, a stream flows through, and parallel to, the ROW. Construction mats will be used to allow for access to the site. These crossing techniques will be used throughout the construction process. Council staff recommends that the temporary bridges and construction mats and associated material used throughout Segment 1A be removed upon completion of construction.

Numerous rock walls exist along the ROW and have been identified by the State Historic Preservation Officer (SHPO) as having significance, as defined in the National Historic Preservation Act of 1966. These rock walls and other cultural resources will require that protective measures be employed during clearing and construction activities. Such measures will be developed in consultation with the SHPO, cultural resource contractor and CL&P prior to construction. No specific recommendations have been documented since an archeological reconnaissance Phase II survey is still being conducted. Council staff recommends that such surveys be submitted for review and approval.

CL&P developed a soil erosion/sedimentation control and revegetation plan and procedures regarding access road development, erosion control and minimization of effects on natural systems incidental to construction. Council staff recommends that the erosion and sediment controls comply with the 2002 Connecticut Guidelines for Erosion and Sediment Control.

Also, CL&P developed a wetland vegetation monitoring and maintenance plan and invasive species control and management plan. Council staff recommends an annual report for three years following ROW construction on the reestablishment of native vegetation to inland wetland and the control and management of invasive plant species.

Six recreational resources are located in the vicinity of the Segment 1a ROW:

- Mattabessett Trail
- Seven Falls Roadside Park
- Cockaponset State Forest
- City of Middletown trails
- Durham Meadows Wildlife Management Area
- Black Pond Wildlife Area.

The Mattabessett Trail crosses the ROW in two locations. The first crossing is along the Scovill Rock Switching Station to Chestnut Junction sub-segment on NU property near the Scovill Rock Switching Station in Middletown. The second location where the Mattabessett Trail and the ROW intersect is on Beseck Mountain just west of the Middlesex/New Haven County line in the City of Wallingford. No permanent restrictions to recreational use are anticipated at either of the Mattabessett Trail sites or other recreational resources. Short-term inconvenience from detouring around construction may occur, but will not be significant. Any damage to these areas will be repaired to pre-construction condition.

A Spill Prevention and Response Plan address actions used to prevent spills in addition to actions that shall be taken should any spills occur including emergency notification procedures. The on-site Environmental Inspectors are responsible for ensuring that contractors implement and maintain spill control measures. All fuel, oil, and hazardous materials management will be in accordance with local, state and federal guidelines. Council staff recommends CL&P attach copies of spill reports with its construction progress report.

CL&P will notify landowners adjacent to the rights-of way not less than 48 hours prior to the initiation of construction. A toll-free number, staffed during working hours and voicemail other hours, will be available specific to the project. All calls will be documented which will initiate a protocol of response. Council staff recommends CL&P provide two weeks advance notice prior to commencement of construction.

CL&P provided a copy of the Project Safety and Health Program. Prior to commencement of construction CL&P requires that all personnel (CL&P and Contractor) involved in construction activities attend a project-specific safety and environmental training session. These training sessions summarize the D&M Plan and other permit/certificate requirements governing the project. The training will emphasize the importance of workplace safety and environmental compliance including disciplinary action. Furthermore, an environmental inspector, the BSC Group previously recognized by the Council will be responsible for inspections and weekly reporting to verify that the construction is performed in accordance with environmental requirements.

The construction and installation of Segment 1a, from survey to energizing, will take approximately 42 months. The schedule is currently under review and subject to modifications. Construction activities are expected to take place during six 10-hour days per week, with additional overtime if necessary. Extensions of the workday and hours may occur on a temporary and case-by-case basis. Council staff recommends that CL&P notify the Council of workday and/or work hour extensions verbally and documented within 24 hours of a business day.

The following items summarize the projected schedule:

▪ Survey	May 2005 – December 2005
▪ Geotech testing	October 2005 – January 2006
▪ Right-of-way clearing	April 2006 – September 2006
▪ Mobilization	July 2006
▪ Structure Removal	August 2006 – September 2008
▪ Structures/Cable installation	July 2006 – November 2008
▪ Cut-overs	August 2006 – December 2008
▪ Site Restoration	October 2007 – November 2009

CL&P proposes the following procedures to address deviations of the D&M Plan:

- For proposed deviations prior to the start of construction or well in advance of commencement of specified activity, CL&P will submit a request in writing for review and approval by the Council;
- For proposed deviations during construction based upon field conditions, CL&P will conduct a telephone conference with Council staff to present the proposed modification and receive verbal approval from the Council Chairman with written specification of the deviation to be submitted within 24 hours after the request; and
- Implementation of deviations to the D&M Plan that are approved by the Council will be documented within the monthly monitoring reports to be submitted by the independent environmental inspector.

Council staff recommends that proposed deviations be authorized by the Chairman with written specification of the deviation submitted within 24 hours of a business day after the request and all other changes require advance notification and Council approval or be subject to enforcement by the Attorney General.

CL&P proposed to provide monthly construction reports however the Environmental Inspector for the Council would provide weekly reports. Council staff recommends that CL&P provide quarterly construction reports noting milestones of construction activity.

To summarize, the Council staff recommends approval of the Section IV D&M Plan as follows:

That CL&P provide two weeks advance notice prior to commencement of construction

That CL&P provide quarterly construction reports noting milestones of construction activity, including spill reports.

That CL&P provide a weekly Environmental Inspector's report.

That the location of the contractor's yard and staging areas be identified and provided to the Council prior to use.

That lay down or pulling station sites be provided prior to commencement of construction and such locations not be located within 50 feet of the edge of a wetland or water body.

That CL&P utilize a professional forester to oversee clearing activities consistent with BMP.

That CL&P conduct a comprehensive walk-over (sweeps) to remove turtles prior to each day's construction activity in the Ball Brook area.

That the placement of construction fencing be no less than 25 feet to the vernal pool and placement of erosion and sediment controls be placed down slope of construction fencing in vicinity to structure #3565.

That best management practices for fueling, operation, and maintenance of vehicles in aquifer zones and inland wetland and watercourses be employed.

That the temporary bridges and construction mats and associated material used throughout Segment 1a be removed upon completion of construction.

That CL&P provide an annual report for three years following ROW construction on the reestablishment of native vegetation to inland wetland and the control and management of invasive plant species.

That CL&P notify the Council of workday and/or work hour extensions verbally and documented within 24 hours of a business day.

That CL&P notify landowners adjacent to the right-of way not less than 48 hours prior to the initiation of construction.

That CL&P provide a blasting plan, if necessary, for review and approval prior to blasting.

That the D&M plans for erosion and sediment controls comply with the 2002 Connecticut Guidelines for Erosion and Sediment Control.

That CL&P provide archeological reconnaissance surveys for review and approval.

That proposed deviations are authorized by the Chairman with written specification of the deviation submitted within 24 hours of a business day and all other changes require advance notification and Council approval or be subject to enforcement by the Attorney General.



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@po.state.ct.us

www.ct.gov/csc

NOTICE OF SERVICE

I hereby affirm that a photocopy of this document was sent to each Party and Intervenor on the service list dated February 28, 2006.

Dated: March 17, 2006

A handwritten signature in black ink, appearing to be "LJ", written over a horizontal line.

Lisa Fontaine

Custodian of Docket No. 272