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September 19, 2008

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Mr. S. Derek Phelps
Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

ORIGINAL

CONNECTICUT
SITING COUNCIL

Re: Docket No. CSC 364 Waterford Substation - The Connecticut Light and Power Company
Application for a Certificate of Environmental Compatibility and Public Need for the
construction, maintenance, and operation of a proposed substation located off Oil Mill Road and
Waterford Parkway (North)

Dear Mr. Phelps:

This letter provides the response to requests for the information listed below.

Response to INTERVENOR-01 Interrogatories dated 09/15/2008
INT-001, 002, 003, 004, 005

Very truly yours,

John Morissette
Manager
Transmission Siting and Permitting
NUSCO
As Agent for CL&P

cc: Service List

Witness: Michael Libertine
Request from: Ahlam Shalhout/Constance Casey

Question:

It would appear site #1 is in the Niantic River Watershed based on the DEP, Niantic River Watershed Management Plan, Map #3.1-1(Exhibit enclosed) detailed at the DEP web site http://www.ct.gov/dep/cwp/view.asp?a=2719&q=379296&depNav_GID=1654.

1. Why has this been omitted from all documentation?
2. Have environmental studies been conducted regarding the impact to the Niantic River Watershed as a result of construction, operation, and maintenance of proposed facility? Please provide documentation available from those studies.
3. An unnamed stream and associated wetland corridor are present running north and south in the east-central portion of the property. (re: Municipal Consultation Filing, date April 2008, page H-1) . It would appear this stream, which is located 100' from the footprint, flows into the Niantic River. What provisions have been made for storm events and/or accident causing spillage of insulating oils and other materials into unnamed brook?

Response:

- A1. The Niantic River Watershed was not identified in the Application because the proposed development will have no direct impacts on this resource. Vegetative clearing and site grading activities associated with the substation are similar in scope and magnitude to that of a single-family residence. No surface water connections exist at the proposed pad site and thus any stormwater being shed from the substation footprint would ultimately exit the property via infiltration. The property is underlain by outwash material, which facilitates the opportunity for water infiltration.
- A2. No studies have been conducted by CL&P (Company) specific to the Niantic River Watershed, which encompasses over 30 square miles and includes thousands of potential point and non-point sources of contaminants. CL&P focused on the two water bodies proximate to the proposed site (Oil Mill Brook and the unnamed brook on the property, which are tributaries to the Niantic River). These resources are discussed in the Application, as well as documents provided to the Town's Conservation Commission which reviewed the project.
- A3. The facility has been designed to further reduce or eliminate pollution sources and minimize stormwater runoff, with the understanding that portions of the site drain into the unnamed brook, Oil Mill Brook, and ultimately the Niantic River. The proposed transformers at the site would house insulating fluids. Each transformer will be surrounded by secondary containment that is designed to hold 110% of the transformer's fluid capacity. This system eliminates the potential for insulating fluid to enter the environment in the event of failure. No additional fluids or potentially harmful materials would be stored or used in the substation. Further, developed areas of the site would be covered with pervious material (trap rock) to facilitate water infiltration to the subsurface. No pavement is planned. Final grading has been designed to properly contain and treat stormwater runoff (via infiltration) on the property prior to discharge to the unnamed brook.

Before any construction occurs, CL&P will prepare a project-specific Development and Management Plan that will incorporate the Company's best management practices (BMPs) for construction activities. The BMPs address spill prevention and control techniques and promote methods to mitigate potential adverse effects to the environment. Prior to construction, CL&P will also install and maintain proper sedimentation and erosion controls consistent with the 2002 Connecticut Guidelines for Soil Erosion and Sedimentation Control.

Once construction is completed, all disturbed or exposed areas would be amended with top soil and seeded to establish a cover of vegetation to permanently stabilize the site.

Witness: Michael Libertine
Request from: Ahlam Shalhout/Constance Casey

Question:

What were the comparative deciding factors and their respective priorities that led to the selection of site#1 as the preferred site relative to site#2?

Response:

As discussed more fully in Section I of CL&P's Application to the Connecticut Siting Council, the major criteria for locating a substation includes: Proximity to distribution load area and existing feeders; Proximity to existing transmission circuits; Ease of access; Earthwork requirements; Sufficient size and shape; Zoning and adjacent land-use constraints; Environmental considerations (wildlife and habitat; wetlands, watercourses and floodplains); Proximity to public water-supply watershed and/or aquifer areas. Although all of these criteria are factored into the site selection analysis, the primary criteria are the engineering aspects so that the purpose of the substation can in fact be achieved.

In summary, development at Site #1 provides an ideal location within the distribution load area and an effective opportunity for connection to the existing transmission infrastructure. In addition, development at Site #2 would have significantly more environmental impacts than the proposed location at Waterford Parkway North (Site #1). Some of the technical and environmental considerations were as follows: Site #1 is physically closer to the existing 115-kV transmission circuit to which it would interconnect (less than 100 feet at Site #1 v. over 500 feet at Site #2), requiring less tree removal and earthwork. The transmission circuit physically crosses Site #1. Interconnection to the existing transmission circuit from Site #2 would require establishing a cleared corridor (approximately 150 in width) through existing woodlands in the southern portion of the lot, a portion of which lies in wetlands. In addition, connection to this circuit at Site #2 would also require securing new rights-of-way and could involve installation of new structures within wetlands, whereas development at Site #1 will not affect wetlands and watercourses.

- More favorable conditions exist at Site #1 for increasing the capacity of the distribution feeder network, as described in the response to #5 on page 3.
- The nearest residence to the proposed facility at Site #1 is more than 600 feet away. Three residential neighbors would be located within 500 feet of a facility at Site #2.
- Site #1 is relatively level, and development requires minimal earthwork. Existing grades at Site #2 exceed 40% in its western portion, limiting development opportunities to the east side of the property, closest to neighbors.
- During construction, equipment and vehicles would access Site #1 from Waterford Parkway North, passing no residences. At Site #2, construction vehicles would pass within approximately 30 feet of two homes located on either side of the existing access to Route 85.

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Data Request INTERVENOR-01
Dated: 09/15/2008
Q-INT-003
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Witness: Michael Libertine
Request from: Ahlam Shalhout/Constance Casey

Question:

The filing states water and sewer facilities are planned to serve the Control Enclosure yet absent from the application. What are the plans associated with building water and sewer facilities on site #1?

Response:

As depicted on drawing C-3 (found in Volume 2, Exhibit 1 of the Application), a private water supply well is planned to be installed along the western side of the proposed substation. In addition, a septic system would be placed south of the substation to accommodate the control enclosure. These features are similar to existing facilities at residences throughout the Town of Waterford. Site soils have been tested and approved by the local sanitarian for installation of the septic system.

The Connecticut Light and Power Company
Docket No. CSC 364 Waterford Substation

Data Request INTERVENOR-01
Dated: 09/15/2008
Q-INT-004
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Witness: Raymond L. Gagnon
Request from: Ahlam Shalhout/Constance Casey

Question:

What is the reason the applicant purchased five acres rather than three acres needed for the planned substation? What are the plans for future expansion beyond the footprint? In what direction is the expansion?

Response:

The appropriate size for a substation is determined by variety of factors including the overall design (including all the clearances for the equipment), the existing infrastructure, the location of the substation with regard to the access to the substation site as well as the amount of land available for purchase. In this case, after consideration of several design factors, CL&P determined that the area required for the substation was three acres. However, a three acre site would mean that the entire property would be devoted to the substation facilities, extending to all property lines. The former property owner, who owned a significant parcel of land, of which the substation property was a small part, decided to offer to sell CL&P five acres. CL&P accepted the offer because the additional two acres, which primarily consists of an area with thick tree cover, provides for sufficient set back from property lines and appropriate land coverage as well as a natural buffer to the neighborhood.

There are no current plans for future expansion.

Witness: Raymond L. Gagnon
Request from: Ahlam Shalhout/Constance Casey

Question:

The application states site #2 provides limited connections to existing 23-kV distribution feeders in two directions (north and south along Route 85). Did the applicant consider the third direction, Cross Road, connecting to Boston Post Road? Why would this constitute extensive distribution line work? Where is the hardship?

Response:

Yes, CL&P considered the third direction for Site #2.

The Waterford Substation has been designed to accommodate a total of eight (8) distribution feeder (circuits). To enhance reliability, the objective is to design the feeders on independent routes. For Site #1 the initial substation configuration will service the area with four (4) distribution feeders. Currently, at the Property there is one feeder. That feeder will be reconfigured to create three feeders on the following independent routes:

- Waterford Parkway North to Cross Road (north)
- Waterford Parkway South to Cross Road (south), and
- Boston Post Road (north)

In addition, a new feeder will be added along Waterford Parkway North eastbound past Cross Road, for a total of four feeder routes. The remaining four feeder will exit the Substation by these routes on existing facilities. In so doing, the reliability of the Waterford distribution system will be enhanced.

Site #2 does not provide as many independent feeder routes and existing distribution facilities (poles) necessary to accommodate the eight (8) distribution feeders. Site #2 is limited to two feeder routes using existing facilities that allow for two feeders in each direction, north and south along Route 85. However, the north route is away from the distribution load area and extensive distribution enhancements such as new feeder installations, field circuit reconfigurations and pole top reclosure equipment installations would be required to match the reliability gained utilizing Site #1. In addition, to accommodate the remaining four feeders, this location will require extensive overhead distribution infrastructure construction along Route 85. Even with this significant distribution feeder work, the capacity of the Substation located at Site #2 would be limited to two of the required four feeder routes exiting the Substation. The use of Site #2 as the location for the Substation would require more overhead distribution infrastructure construction and results in a lower reliability distribution network design than if the Substation is built on Site #1.