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July 16, 2007



**VIA FEDERAL EXPRESS**

Daniel F. Caruso, Chairman
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

RE: **DOCKET NO. 327** 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 of Commerce Park Drive, Oxford, Connecticut

Dear Chairman Caruso:

In connection with Docket No. 327, enclosed please find the original and twenty (20) copies of CL&P's Comments on the Council's Draft Findings of Fact. A copy will also be filed electronically.

Very truly yours,

Marianne Barbino Dubuque

MBD/pam
Enclosures

cc: Mr. Robert Carberry
Mr. Jeffrey Martin

| | | |
|---|---|---|
| **DOCKET NO. 327** – The Connecticut Light and Power Company (CL&P) application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and operation of a proposed substation located off of Commerce Park Drive, Oxford, Connecticut. | } | Connecticut Siting Council |
| | } | ~~June 26,~~July ___, 2007 |



**Comments on CSC's DRAFT Findings of Fact**

**~~Introduction~~**

2. CL&P received Council approval to acquire the subject property and related transmission line easement on June 28, 2005 (~~docket~~Docket 304) in accordance with CGS 16-50z (a). CL&P acquired the property and the related transmission line easement on October 31, 2005. (CL&P 1, Vol. 1; CL&P 3, p. 7)

Note: CL&P gave notice and was then required to obtain the Council's approval for the transmission line easement, which was the main purpose of Docket 304 since Council approval is not required for advance acquisitions of land for substations. Reference Petition Number 237 for a relevant Council ruling.

3. The purpose of the proposed facility is to increase the capacity and improve reliability of the electric power distribution system in Oxford. (CL&P 1, Vol. I, p. 1)

Note: It is more accurate to describe reliability in terms of an improvement.

11. On December 29, 2006, the CEAB issued a Request for Proposals (RFP) seeking alternatives to the proposed substation~~,~~ pursuant to CGS § 16a-7c. (Council Administrative Notice Item ~~32~~30)

12. No proposals for alternatives to the proposed substation were received by the CEAB. (Council Administrative Notice Item ~~32~~30)

13. On April 5, 2007, the CEAB issued its final report with the findings that there is no suitable alternative for the proposed substation. (Council Administrative Notice Item ~~32~~30)

Note: As to 11, 12 and 13, Item 30 is the correct citation.

16. The DOT ~~is opposed to~~cannot support the construction of the substation in its present location on the ground that it is located within or adjacent to the existing and future Runway Protection Zone ("RPZ") of Runway 36 of the Waterbury-Oxford Airport, adjacent to the proposed site. The DOT notes that the FAA does not consider a substation ~~is not~~ a prohibited land use, but ~~rather it would be located in a preferred~~the FAA prefers that no development ~~zone~~exist within the RPZ. The DOT also requests that CL&P lower the height of the existing transmission towers located in the glide path of the airport and the performance of an electronic noise survey to ensure electronic noise from the substation does not affect airport equipment. (DOT Comments of April 25, 2007)

Note: The revisions more accurately reflect the DOT's comments.

19. The DEP states that the proposed site is an appropriate choice for the Oxford substation in terms of compatible surroundings, environmental impacts, ease of constructability, and system needs and will have little environmental impact on natural resources or the adjacent Larkin State Park Trail. (DEP Comments dated May 3, 2007).

Note: The revisions more accurately reflect the DEP's comments.

32. The proposed substation would provide 70 to 75 MVA of initial substation capacity to the system, meeting the demand needs of Oxford and improving reliability of Oxford's distribution system by eliminating reliance on the neighboring substations. (CL&P 1, Vol. 1. p. 17)

Note: The word "initial" should be added to illustrate that the substation capacity is capable of future expansion.

37. CL&P is actively promoting distributed generation in the ~~area~~areas served by the Beacon Falls, Bates Rock, and South Naugatuck substations. ~~Although there is currently 11 MW of distributed generation in the region with another 2.5 MW in the planning stages, distributed generation is a limited sources~~Since 2005, CL&P estimates that these areas have seen a peak-demand savings of approximately 11 MW. To date approximately 2.5 MW of generators at multiple customer locations are under consideration for the 2007-2009 timeframe. Distributed generation is a limited source of power and would not alleviate the need for the substation. (CL&P 1, Vol. I, p. 20)

Note: The revisions more accurately reflect the distributed generation issues.

38. The Council examined alternative substation locations as part of Docket ~~304 and~~304. The six sites evaluated were: Riggs Road, Jacks Hill Road, Prokup Road, Christian Road, Oxford Road and High Hill. Criteria used by CL&P for site evaluation included proximity to an existing 115kV transmission line; proximity to customer load and distribution lines; environmental impact; zoning and present land use; and topography. The Council determined the current site was the most appropriate given its central location and easy interconnection to 115-kV transmission circuits. The Council approved the site on April 21, 2005. (CL&P 1, Vol. I, p. 22; CL&P 1, Vol. II, App. C)

Note: The revisions include the analysis in Docket 304 and provide more complete findings in this Docket to address the requirement for consideration of alternative sites set forth in the Council's Electric Substation Facility Application Guide.

40. The proposed Substation would be located on a ~~15.7~~15.77-arce property located on Commerce Drive in Oxford. This project would include the construction of a new 115-kV to 13.8-kV electric substation, construction of an access drive, and the installation of three new transmission poles. To facilitate the interconnection of the substation with the regional transmission grid, and to allow for future transmission line changes, CL&P obtained a 4.4-~~arce~~acre easement, located to the immediate north of the ~~parcel~~15.77-acre parcel and abutting CL&P's existing easement on its west side. (CL&P 1, Vol. I, ~~ppp~~.11)

Note: The revisions correct the property acreage and more accurately reflect CL&P's reasons for acquiring the 4.4-acre easement.

~~43.~~48. The substation would be located on a 226-foot by 229-foot area enclosed by ~~an eight~~a seven-foot high chain link ~~and~~fence with one-foot of additional barbed wire ~~fence~~. CL&P would establish a trap-rock surface within the compound. A locked gate would be installed across the driveway entrance. (CL&P 1, Vol. 1, p. 51; CL&P 3, p. 21)

Note: The revisions more accurately reflect the fence design and its different components.

49. Access to the site would be from a ~~60~~600-foot long, 15 foot wide gravel ~~road~~drive of new construction. (CL&P 1, Vol. I, p. 11)

Note: The revisions correct the length and designation of the access drive.

53. The feeders would exit the substation in underground conduits to Commerce Drive where the ~~line~~feeders would then be routed overhead on new wood poles. (CL&P 1, Vol. I, p. 12)

Note: The revision clarifies that the feeders exiting the substation are the same feeders that run overhead on the new wood poles.

64. Approximately 24 trees with a diameter of six inches or greater at breast height would be removed to develop the substation site and access road. (CL&P 2, Q. 4)

Note: The revision is required for completeness.

89. The only unobstructed view of the substation would be from Commerce Drive, a ~~dead-end~~ road that only serves industrially zoned lots. (CL&P 1, Vol. I, p. 60, Vol. II, Attachment B).

Note: The revision reflects that Commerce Drive will no longer be a dead-end road.

92. The Institute of Electrical and Electronic Engineers has issued ~~a~~guideline limits for long-term public ~~health~~ exposure ~~level~~ of 9,040 milliGauss (mG). The International Commission on Non-Ionizing Radiation Protection has ~~issue a~~issued guideline limits for long-term public ~~health~~ exposure ~~level~~ of 833 mG. (CL&P, Vol. I, pp. 75-76)

Note: The IEEE and the ICNIRP refer to guideline limits for long-term public exposure not long-term public health exposure levels.

94. To determine how the magnetic field would be altered by the proposed substation, CL&P performed pre- and post-construction magnetic field calculations based on ISO New England's 2013 peak-load day line currents. The interconnection of the substation would primarily affect current flows of the 1575 circuit. (CL&P 1, Vol. I, p. 71; CL&P 3, p. 26)

Note: This finding was missing the word "field".

96. After construction, and through the year 2013, the highest calculated magnetic field levels at the north property line would increase ~~from 4.8 mG~~ to 25.8 mG under peak-day average load conditions and ~~from the 7.0 mG~~ to 39.6 mG under peak load conditions. The highest calculated magnetic field levels at the south property line would increase ~~from 4.6 mG~~ to 7.1 under peak-day average load conditions and ~~from 6.5~~ to 10.9 mG under peak load conditions. (CL&P 1, Vol. I, pp. 73, 77-82)

Note: The revisions reflect that the Application contains figures with general reference points as opposed to exact references. While the current levels may be approximately discernible from the charts provided on pages 77-82 of the Application, Volume 1, the exact levels are not cited in the Record. It should also be noted that there is no time period specificity for these changes.

102. Reliability would be ~~maintained by~~improved by incorporating a "loop through" configuration from an existing 115-kV overhead transmission circuit, transformer protection devices and redundant automatic protective relaying equipment. Protective relaying equipment would provide automatic detection of abnormal conditions. When an abnormal condition occurs, a protective trip signal would be sent to the respective circuit breaker(s) to isolate faulted equipment. CL&P plans to install redundant protective relaying schemes with continuous monitoring. (CL&P 1, Vol. I, p. 50)

Note: The "loop through" concept should be added to this finding because it is another mechanism for improving reliability.

103. The ~~station~~substation would be remotely ~~operated~~controlled and ~~maintained~~monitored using digital metering systems and a Supervisory Control and Data Acquisition System. (CL&P 1, Vol. I, p. 12)

Note: The revisions are a more accurate description of the functions.

108. The DOT ~~is requesting~~recommended that all CL&P structures and accompanying lines within the airport ~~approach plane~~Approach Surface and Threshold Siting Surface be lowered to ~~ensure aviation~~improve safety. (DOT letter of April 25, 2007)

Note: The revisions track the language of the DOT letter.

109. The redesign of the existing transmission towers within the glide path ~~are~~is not part of the substation proposal. No modifications to the heights of the existing towers are required for the substation interconnection. (Tr. 1, pp. ~~59-60~~26, 58)

Note: The revisions correct the typographical error in the first sentence and the citation to the Record.

110. CL&P would continue to work with the DOT ~~to resolve the tower height issue~~and the Airport to address concerns raised relative to the existing transmission lines near the Airport and identifying and pursuing a long term solution. CL&P submitted a preliminary design and cost

estimate to the DOT on May 30, 2007. Any redesign would require ISO-New England approval. (Tr. 1, pp. 26, 61; CL&P late file of June 5, 2007)

Note: The revisions more accurately reflect CL&P's commitment.

Recommended Additional Findings of Fact

1. To be inserted into the Introduction Section:

"CL&P erected a sign at the corner of the access road, identified now as Commerce Road on April 30, 2007. The sign included the Applicant's name, the type of facility proposed, the maximum structure heights for both the substation and transmission line structures, the public hearing date and location, the availability of the applicable documents for Docket 327, and contact information for the Council. (Tr. 1, pp. 22-23)"

Note: This finding is necessary to demonstrate compliance with the Council's Electric Substation Facility Application Guide.

2. To be inserted into the Environmental Considerations Section:

"According to the State and Federal Listed Species and Significant Natural Communities Map for the Town of Oxford (June 2006) prepared by the DEP NDDB, the proposed substation is not located within any mapped NDDB area of concern. (CL&P 1, Vol. 1, p. 38; CL&P 4, A. Carroll p. 9)"

"The proposed substation would not be located within a State-designated Aquifer Protection Area. According to the Town of Oxford, there are no public water supply wells within ¼ mile of the subject property. Residences located within ¼ mile of the proposed substation rely on private wells as drinking water sources. (CL&P 1, Vol. 1, p. 41)"

Note: These findings reflect important components of the Council's evaluation.

3. To be inserted into the Safety and Reliability Section:

"Fire/smoke detection would automatically activate an alarm at Connecticut Valley Electric Exchange and the system operators would then take the appropriate action. The control enclosure would be equipped with fire extinguishers. (CL&P 1, Vol. 1, p. 50)"

Note: This finding should be added to thoroughly explain the safety features of the substation.

"CL&P's existing transmission line structures pre-date the Airport's operations. The circuits on the easterly tower line were energized in 1923, and the circuits on the westerly tower were energized in 1961. (Tr. 1, pp. 26; 35; CL&P 3, K. Bowes p. 31)"

"In the late 1960s, CL&P voluntarily lighted and marked the transmission line structures after discussions with the State Aeronautical Commission. Four towers are lighted and five towers are marked with red and white paint. (Tr. 1, pp. 35, 38)"

Note: These findings would provide appropriate context for the relationship between CL&P's facilities and the Airport and evidence their co-existence for many years.

Recommended Correction

In Findings of Fact Numbers 22, 23, 24, 61, 63, 65, 66, 67, 76, 77, and 89 there is a reference to an "Attachment" to the Application. The correct reference would be "Appendix" to avoid any confusion.