DOCKET NO. 398 - Northeast Utilities Service Company, on behalf of The Connecticut Light and Power Company Application for a Certificate of Environmental Compatibility and Public Need for the Construction, Maintenance, and Operation of the Sherwood Substation located at 6 New Creek Road, Westport, Connecticut	}	Connecticut
	}	Siting
	}	Council
	}	May 13, 2010

CL&P's Comments on the CSC's Draft Findings of Fact dated May 5, 2010

Please note that new language is shown in bold below.

A. RECOMMENDED REVISIONS TO PROVIDE GREATER CLARITY OR REFLECT UPDATED INFORMATION IN THE RECORD

7. Pursuant to CGS § 16-50(b), notice of the application was provided to all abutting property owners **and other property owners proximate to CL&P's Property** by certified mail. (CL&P 1, Vol. I, p. Q-5; CL&P 5, p. 29)

9. Pursuant to CGS § 16-50*l*(a)(2), the project is exempt from the Connecticut Energy Advisory Board (CEAB) **mandatory** request for proposal process. [Delete "As a courtesy"] CL&P notified the CEAB of the project on October 14, 2009 [Delete "and submitted"] **and provided a copy of the** full application on December 29, 2009. (CL&P 1, Vol. I, p. R-2)

   Note: This revision more accurately reflects CL&P's obligations and interactions with the CEAB. CL&P submitted an application only to the Council.

33. CL&P estimates load growth in Westport would increase by 2% per year, reaching **128.84** MVA by 2015. The estimate is based on current and proposed residential construction in the area. (CL&P 1, Vol. I, pp. G-6, 7; CL&P late file of April 15, 2010; **CL&P 5, p. 13**)

   Note: Table G-2 was updated in Mr. Gagnon's pre-filed testimony. Once the off-load from Compo Substation is included, the load growth estimate for 2015 increases from 125.52 to 128.84 (See also #41, revised Table G-2, in CL&P's Proposed Findings of Fact submitted to the Council on April 28, 2010) ("PFOF").

34. The proposed substation would allow CL&P to remove the temporary transformers at the Sasco Creek and Weston Substations, retire the Greens Farms Substation, which is **over 50 years old and space-constrained,** [Delete: past its service life of 40-50 years] and allow for additional capacity to meet projected demand growth in Westport. (CL&P 1, Vol. I, p. G- 6, 7, 9)

Note: The new language more accurately reflects information in the Application.

37. Various programs in conservation and demand management reduced demand by 1.8 MW in 2008. A comparable reduction cannot be predicted annually, since participation in such programs has declined as economic incentives have become less certain. Even if a 1.8 MW per year reduction were sustained through 2015, however, it would fall short of the estimated demand increase of **12.14** MW during the same period. (CL&P 1, Vol. I, pp. G-6, 14)

Note: Table G-2 was updated in Mr. Gagnon's pre-filed testimony. Once the off-load from Compo Substation is included, the difference in the load growth estimate from 2010 (116.7) to 2015 (128.84) increases from 11.8 to 12.14 (See also PFOF #41, revised Table G-2).

41. ISO-New England approved the proposed project on **January 7, 2009. (CL&P 5, p. 11 and Attachment 2)**

Note: Mr. Gagnon's pre-filed testimony included an updated letter from ISO-New England.

44. Future use of the Sasco Creek Substation is not possible because it is specifically reserved for use by the DOT to supply electricity to the railroad. The DOT allowed CL&P to use the substation on a temporary basis under the belief CL&P would only need the space until March 2008.

Replace with: **CL&P received permission from Metro-North/DOT to install the power transformer only on a temporary basis at Sasco Creek Substation, until a permanent solution was put in place. Because Metro-North/DOT requires the space occupied by CL&P's transformer for railroad purposes, CL&P planned to remove its transformer from Sasco Creek Substation by no later than 2012. (CL&P 1, Vol. I, p. G-5; CL&P 1, Vol. II, Exh. 10)**

Note: This FOF was included in CL&P's PFOF as #38 and more accurately reflects that both the DOT and Metro-North have been clear in their position that CL&P's use of the Sasco Creek Subdivision was only temporary (see in particular the letters in CL&P 1, Vol. II, Exh. 10). Moreover, this FOF responds to Council Member Senator Murphy's request for further clarity.

45. CL&P investigated six potential locations along the existing transmission line right-of-way in Westport and selected the proposed site as most preferable. The five rejected locations and the reasons for their rejection are as follows:

c. DOT property west of existing Sasco Creek Substation **located on Clayton Street, off Maple Lane, on property operated by Metro-North Railroad (Metro-North) and owned by the DOT** – DOT **and Metro-North** would not allow **permanent use of the substation by CL&P**.

Add to the cite: **pp. G-1-G-2**

Note: This FOF addresses Council Chairman Caruso's request for the location of the Sasco Creek Substation and Council member Ashton's request for inclusion of Metro-North's position.

52. Four residences are southeast of the site along Maple Lane, approximately **479** to **549** feet **as measured from the center of the substation to the nearest edge of the homes** [Delete: from the proposed substation fence]. The backyards of the residences are along the tidal marsh. (CL&P 1, Vol. I, Fig. **H-2**)

Note: The new language clarifies the measurements shown in Fig. H-2.

56. The substation would be accessed by a new 15-foot wide paved driveway extending from New Creek Road, across from the train station parking lot. (CL&P 1, Vol. I p. F-3; CL&P 5, p. 4)

Add: **A bituminous concrete apron would be provided at the entrance of the Property along New Creek Road, south of the railroad overpass and west of the entrance to the Metro-North commuter station parking lot. Initially, the new driveway will be stabilized with stone, and anti-tracking mats installed. The new driveway will later be finished and gated and the existing driveway and pavement would be removed and the area landscaped.**

Add to the cite: **p. K-4**

Note: This FOF addresses Council Chairman Caruso's request for an expanded FOF regarding the driveway.

65. The estimated cost for the siting, design, and construction of the proposed substation and supporting infrastructure is **$20,100,000. (CL&P 5, p. 7)**

Note: Mr. Gagnon's pre-filed testimony updated the estimated cost.

74. Storm water would be contained on-site using a bioswale which would direct surface flows toward the on-site wetland. The swale outlet would feature rip-rap protection to reduce the velocity of incoming flows. The pervious surfaces of the

substation area **in combination with the removal of the home and paved driveway** would reduce runoff compared to the existing on-site surfaces. (CL&P 1, Vol. I, p. L-2; DEP Comments of March 16, 2010)

Note: As set forth in the DEP letter, both site development and restoration will lead to reduced runoff.

85. The substation would be four to eight feet below the present ground elevation of the property. Shallow berms would be located on the east and **south** sides of the substation to provide additional screening from New Creek Road. (CL&P 1, Vol. I, p. K-10; Tr. 1, pp. 30, 50-51)

Note: During the location review phase, CL&P proposed a berm on the west side. At the Conservation Commission's request, that berm was eliminated.

90. **Because magnetic fields from substation equipment decrease rapidly with distance,** magnetic field levels from operation of the substation equipment would **commonly** be **in the same range as** background levels **in homes, which commonly range up to** 4 milliGauss (mG), at the property lines. Magnetic fields would decrease to low levels a short distance beyond the substation fence. The fence would be at least 40 feet from any property line. (CL&P 1, Vol. I, pp. M-1, 9; Tr. 1, pp. 94-96)

Note: The language in the first sentence of DFOF #90 seems to suggest that CL&P projected magnetic fields at the property lines to be around 4 mG; however, the Application reflects that magnetic fields would be at background levels and that background levels in homes are commonly up to 4 mG.

91. The highest magnetic field levels on the property **line produced by the transmission lines or the substation equipment** would be where the connecting transmission lines from the #1890 and the #1578 circuits **closely abut or** cross over the north property line. Delete: [Magnetic field levels below these lines would be 14 to 16 mG] However, this area is largely inaccessible to the public. (CL&P 1, Vol. I, pp. M-1, 11, **Fig. M-1**)

Note: The revisions are necessary to correct the impression that 14 to 16 mG results in those areas from CL&P's facilities, since those areas are also affected by the railroad source.

93. Sources of magnetic fields along New Creek Road, other than negligible amounts from the substation, include the existing transmission lines and the railroad catenaries. Magnetic field levels directly under the existing transmission lines

range from 15 to 21 mG. Magnetic fields from the railroad **at about 15 feet from the nearest tracks** could range from 10 to 70 mG depending on railroad system operating conditions. (CL&P 1, Vol. I, pp. M-1-4; Tr. 1, pp. 77-78)

Note: The additional language more accurately reflects Mr. Carberry's testimony in Tr. 1, pp. 77-78.

B. RECOMMENDED ADDITIONAL FOF

The project has been designed in a manner consistent with the Council's *Electric and Magnetic Fields Best Management Practices for the Construction of Electric Transmission Lines in Connecticut*, dated December 14, 2007 (BMP). (Council Administrative Notice Item 3; CL&P 1, Vol. I, p. M-12)

CL&P's design of the Substation is consistent with the BMP which incorporates field management practices as follows:

- **The Substation has been located very close to an existing transmission line so that the length of Substation entry spans is very short.**
- **Optimum transmission circuit phasing would be retained to enhance magnetic field cancellation. Under the modeled system conditions specified in the BMP, the magnetic field levels would increase at peak load by 0.08 mG at a point 300 feet south along Line West (i.e., a path perpendicular to CL&P's transmission lines #1890 and #1130 and west of the Substation), and decrease by 0.12 mG at this same point during the seasonal peak average load, five years after the Substation is placed in service.**
- **The Substation equipment has been located at a sufficient distance from Property lines so that this equipment makes no noticeable contribution to MF levels along these Property lines.**

(CL&P 1, Vol. I, p. M-12, Fig. M-1; Tr. 1, pp. 14-15; Council Administrative Notice Item 3)

Note: These FOFs were included in CL&P's PFOF as #101 and #109, respectively and are intended to address Dr. Bell's request for FOFs discussing the Council's BMP.

C. RECOMMENDED TEXT CORRECTIONS/ADDITIONS

17. Greens Farms Academy, a school **with its academic building** approximately 850 feet south of the site …

30. Sasco Creek Substation, a bulk power facility **owned** by the DOT

39. A majority of the **growth in** electric demand …

42. … CL&P **expects to** remove the Greens Farms Substation …

71. Dominant species include … **sensitive fern** and tussock sedge.

76. Construction of the site would not affect any state **or federal ….**

D. RECOMMENDED EDITORIAL CORRECTIONS

Note 1: All references to Vol. II, Tab should be Vol. II, **Exhibit**

Note 2: References to "would" should be changed to "**will**" (per Mr. Phelps' request).

14. … most affect**ed** residential areas.

30. an additional 9.3**7**5 MVA transformer

51. The Giunta residence is **494** feet

79. … the use of an **imbiber** bead **containment** system

E. RECOMMENDED CORRECTIONS/ADDITIONS TO REFERENCES TO CITATIONS

6. CL&P 5, p. 29 and **Attachment 6**

8. CL&P 1, Vol. I, pp. **Q-3,** 4

11. The references to relevant comments should be revised to reflect new numbering, as follows: 74, **80, 81**

18. CL&P 1, **Vol. I,** p. R-1

19. CL&P 1, **Vol. I,** p. R-1

22. add: **CL&P 1, Vol. II, Exhibit 6**

27. replace with: **Westport Conservation Commission Comments dated January 11, 2010**

88. Turkey Hill Road **South**