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
Internet: ct.gov/csc

Daniel F. Caruso
Chairman

May 9, 2007

TO: Parties and Intervenors

FROM: S. Derek Phelps, Executive Director

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 Commerce Park Drive, Oxford, Connecticut.

Revised comments have been received from the Department of Transportation. Revisions include a corrected project reference and an attached site plan. Copies are attached for your review.

c: Council Members

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION
2800 Berlin Turnpike
P.O.Box 317456, Rm. 3214
Newington, CT. 06131-7546

RE: **Docket 327** –Pursuant to C.G.S. 16-50/(a), 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, and operation of a substation facility located in a proposed industrial park in the Town of Oxford, Connecticut.

The Department of Transportation (D.O.T.) has reviewed the above-mentioned Docket and has the following comment.

The Office of Aviation and Port Planning has reviewed the Connecticut Siting Council Application for Docket 327, "Oxford Substation, Oxford, CT" submitted by Connecticut Light & Power. This office offers the following comments.

The Connecticut Department of Transportation (Department) has been discussing with Connecticut Light & Power (CL&P) since December of 2004, the location of the proposed substation and potential impacts to Waterbury-Oxford Airport (OXC). CL&P informed the Department of their intention to build a substation on the subject property and requested comments on this proposal. No mention of these discussions is included in the CL&P application to the Siting Council.

All proposed facilities (substation and poles) would be located within or adjacent to the existing and future Runway Protection Zone's of Runway 36, along the extended center line of Runway 36. The RPZ is a trapezoidal area located beyond the end of the runway end that should be controlled by the airport for the protection of people and property on the ground. (See FAA Advisory Circular 150-5100-13 Change 10.) While this in itself in not a prohibited land use, the FAA prefers that no development exist within the RPZ. Early in CL&P's planning process, the Department advised CL&P that the location as currently proposed in Docket 327 is not ideal, because it is within the RPZ.

FAA regulates airspace around all public use airports in the United States per Federal Aviation Regulation (FAR) Part 77 – "Objects Affecting Navigable Airspace". This FAR identifies a series of geometric plans (i.e. imaginary surfaces) that extend outward and upward from the Airport's runways and define obstruction clearing requirements. These surfaces identify the maximum acceptable height of objects by defining three-dimensional surfaces surrounding all sides of the airfield. When an object penetrates an imaginary surface, it is considered an airspace obstruction, and may present a hazard to air navigation. These surfaces include the Approach Surface, as well as related design standard such as the Threshold Siting Surfaces (TSS). These surfaces are longitudinally centered on the extended runway centerlines, extending outward and upward from the ends of the primary surface. For Runway 36 the Approach Surface is 50:1 and the TSS is 34:1. (See the attached Airport Layout Plan drawing and Inner Approach.)

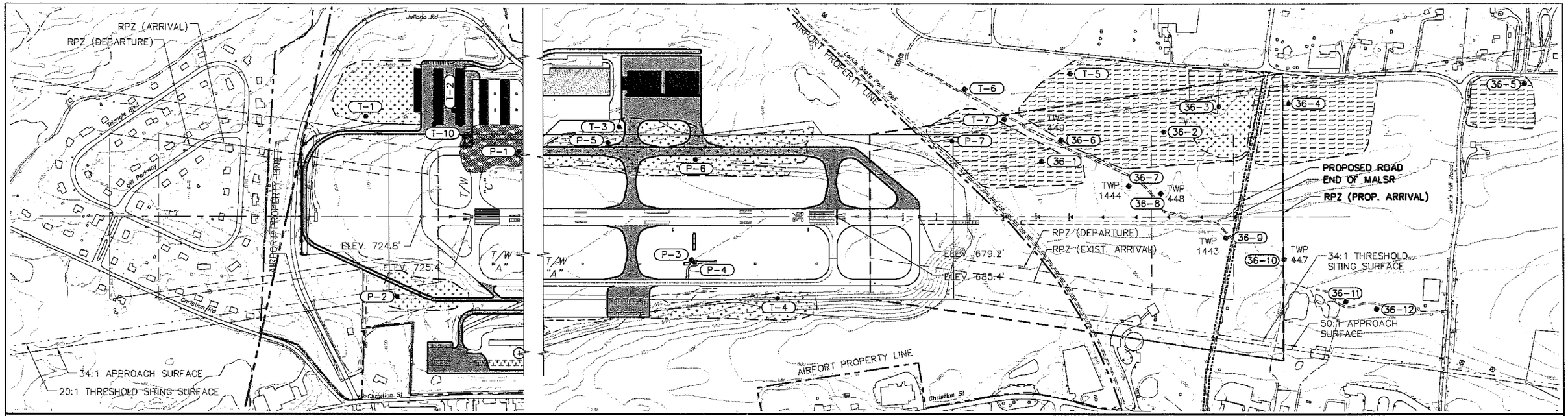
While the proposed substation itself is located beneath the precision FAR Part 77 Approach Surface to Runway 36 at OXC, the existing towers and their accompanying power lines that will be modified to connect with the substation do penetrate the FAR Part 77 Approach Surface and Threshold Siting Surface (TSS). Although these towers are equipped with obstruction lighting, removal or lowering of the towers and their accompanying power lines out of the Approach and Threshold Siting Surfaces is recommended to improve safety. CL&P has been requested by ConnDOT to determine the feasibility of removing these Towers and their accompanying power lines from the Approach Surface and TSS. However, no mention of this feasibility has been made in their submittal to the siting council.

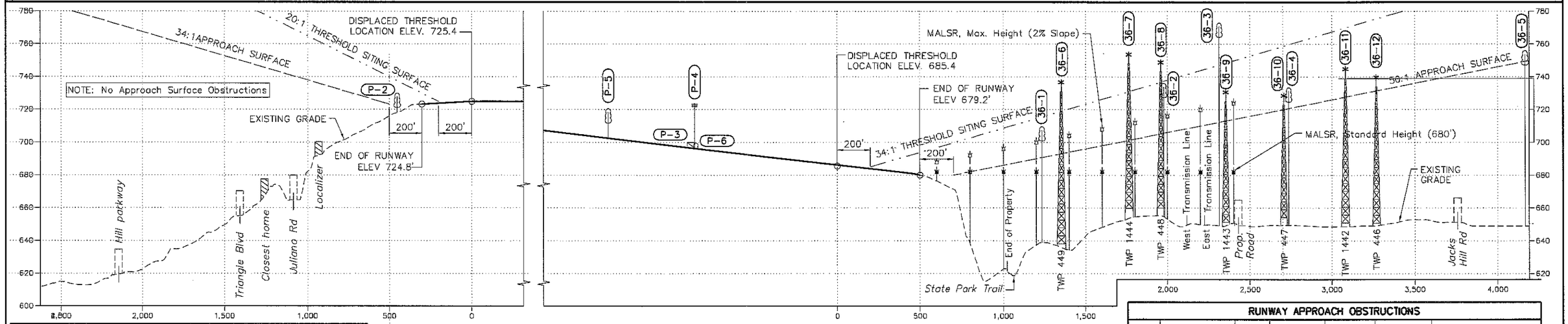
Section 15-74c of the Connecticut General Statutes states that written permission from the Commissioner of Transportation is required before any service company can erect, recable or reconstruct and overhead line or facility within one half mile of any airport runway on a public airport. The existing power lines are 1,800 feet from the runway end, well within one half mile set forth in Section 15-74c. As part of Docket 327, CL&P proposes to alter the existing power lines. Therefore, CL&P must obtain approval from the Commissioner of Transportation before beginning construction or alteration of power lines within 1/2 mile of an airport in order to comply with the provisions of Section 15-74c.

Docket 327 indicates that the proposal is consistent with state plans. Note that the approved 1995 OXC Airport Layout Plan includes the potential easement of the RPZ property, relocation of the transmission line and installation of the Medium Intensity Lighting System w/ Rails (MALSR). (This is a lighting system to aid pilots of aircraft on final approach to Runway 36.) Docket 327 does not make reference to the 1995 OXC Airport Layout Plan.

The Department would also require CL&P to establish a baseline of existing electronic noise in the vicinity of the substation and to show that any increase in this baseline will not have any adverse effect to OXC's localizer, glide slope or distance measuring equipment. If the substation were to be constructed as proposed, CL&P will hold the Department harmless for any adverse affect to the localizer, glide slope or distance measuring equipment at OXC resulting from increased electronic noise due to the construction and operation of the substation in the proposed location.

The Department cannot support the construction of this substation in its present location due to CL&P's failure to study and report on their ability remove the power lines from the FAR Part 77 Approach Surface and the TSS at OXC airport and to prove any increase in electronic noise will not have an adverse effect on OXC's landing aids.





TRANSITIONAL SURFACE OBSTRUCTIONS

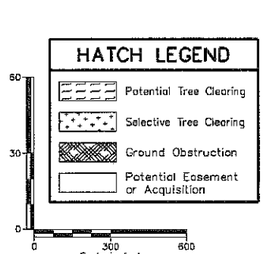
Number	Trees	Top Elevation	Elevation of Surface	Penetration	Ownership	Proposed Action
T-1	Trees	750'	740'	10'	State	Cut/remove
T-2	Light Tower	760'	744'	16'	State	None/lighted
T-3	Trees	728'	718'	10'	State	Cut/remove
T-4	Trees	707'	698'	9'	State	Cut/remove
T-5	Trees	742'	712'	30'	Private	None – Dis. Thresh.
T-6	Trans. Tower	730'	722'	8'	Utility	Light
T-7	Trans. Tower	736'	695'	41'	Utility	Bury Trans. Line
T-8*	ATCT	782'	765'	27'	State	None/Lighted
T-9*	Restaurant	730'	720'	10'	State	Light
T-10	Proposed T-Hangers	745'	735'	10'	State	Light

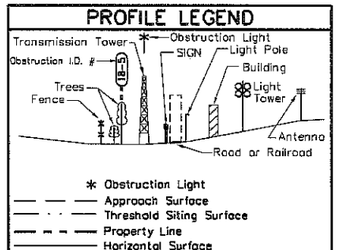
Easement or Acquisition Required *Not Shown, See Alp-2

PRIMARY SURFACE OBSTRUCTIONS

Number	Description	Top Elevation	Elevation of Surface	Penetration	Ownership	Proposed Action
P-1	Ground	728'	725'	3'	State	None
P-2	Trees	730'	725'	5'	State	None–Displaced threshold
P-3	GS Building	700'	695'	5'	State	None–Lighted
P-4	GS Antenna	724'	695'	29'	State	None–Lighted
P-5	Trees	727'	703'	24'	State	Cut/remove
P-6	Trees	700'	695'	5'	State	Cut/remove
P-7	Trees	680'	679'	1'	State	None–Displaced threshold

Easement Or Acquisition Required





RUNWAY APPROACH OBSTRUCTIONS

Number	Description	Top Elevation	Elevation of Surface	Penetration	Ownership	Proposed Action
36-1	Trees	710'	690'	20'	Private	None–Displaced Threshold
36-2	Trees	736'	705'	31'	Private	None–Displaced Threshold
36-3	Trees	773'	712'	61'	Private	Selective Cut#
36-4	Trees	734'	720'	14'	Private	None–Displaced Threshold
36-5	Trees	756'	749'	7'	Private	None–Displaced Threshold
36-6	Transmission Tower 449	731'	692'	39'	Utility	Bury Transmission Line
36-7	Transmission Tower 1444	747'	700'	47'	Utility	Bury Transmission Line
36-8	Transmission Tower 448	742'	705'	37'	Utility	Bury Transmission Line
36-9	Transmission Tower 1443	724'	713'	11'	Utility	Bury Transmission Line
36-10	Transmission Tower 447	722'	720'	2'	Utility	None–Displaced Threshold
36-11	Transmission Tower 1442	739'	727'	12'	Utility	None–Displaced Threshold
36-12	Transmission Tower 446	734'	731'	3'	Utility	None–Displaced Threshold
36-13*	Utility Pole	790'	782	8'	Utility	None–Displaced Threshold

Easement or Acquisition Required * See ALP-5

Revisions:	Drawn By:	App'd. By:	Date:

Draft

14.1 Degrees° W Magnetic
Jan. 2005, Rate of Change 0.0°

Designed By:	Date:
POM	2-06
Drawn By:	Date:
PM	2-06
Checked By:	Date:
MR	2-06

CLOUGH HARBOUR & ASSOCIATES LLP
2139 Silas Deane Highway, Suite 212, Rocky Hill, CT 06067-2336
www.cloughharbour.com
CHA Project No. 12489

CONNECTICUT DEPARTMENT OF TRANSPORTATION

WATERBURY OXFORD AIRPORT OXC

Waterbury–Oxford Airport Master Plan Update

INNER APPROACH SURFACE DRAWING

Drawing No. ALP-4

SCALE: AS NOTED | DATE: JULY 2006 | SHEET 4 OF 7

File: U:\12489\ACAD\ALP-4_PLAN-PROFILE_12489.DWG
Saved: 7/31/2006 12:32:35 PM Plotted: 7/31/2006 12:33:00 PM User: Medina, Perry