The United Illuminating Company
100 Marsh Hill Road
Orange, CT 06477

A **UIL HOLDINGS** COMPANY

VIA ELECTRONIC MAIL AND FedEx

November 19, 2015

Mr. Robert Stein
Chairman
The Connecticut Siting Council
Ten Franklin Square
New Britain, CT 06051

Re: The United Illuminating Company's Notice of Exempt Modification Pursuant to R.C.S.A. § 16-50j-58 to Existing Energy Facility Site at 732 Naugatuck Avenue, Milford, Connecticut – **Notice of Exempt Modification**

Dear Chairman Stein:

Pursuant to Regulations of Connecticut State Agencies ("R.C.S.A.") § 16-50j-58, The United Illuminating Company ("UI" or "Company") hereby notifies the Connecticut Siting Council (the "Council") of its intent to make exempt modifications to its substation at 732 Naugatuck Avenue, Milford, Connecticut ("Devon Tie" or "Facility" or "Energy Facility Site"). The $625 filing fee, along with two copies of this Notice of Exempt Modification ("Notice"), are enclosed herewith.

UI has not included engineering drawings that depict the Facility and show the modifications, as requested in the Council's Modification of Existing Energy Facilities Application Guide, dated April 2013, as such drawings contain Critical Energy Infrastructure Information ("CEII"). If the Council so desires, UI can supplement this letter with the aforementioned drawings accompanied by a motion for protective order.

Additionally, UI has not included a noise analysis with this Notice as the modifications primarily concern the grounding at the site and will have no impact on the noise produced by the Facility.

Existing Energy Facility

The site is located at 732 Naugatuck Avenue, Milford, Connecticut. UI acquired this parcel in 1955 and owns it in fee simple. The latitude and longitude of the Facility is 41.206966 by -73.105577. The Facility's boundaries are depicted on the follow satelite image.

Proposed Modifications

As part of UI's continuing efforts to provide safe and reliable power to its customers, select substations have been subject to a thorough design review studies by internal and external subject matter experts. The focus of these studies is to identify potential issues with respect to load limitations, grounding, structural and miscellaneous auxiliary components of the substation. The result of these studies indicate that the following modifications are needed to ensure the delivery of safe and reliable power. These modifications are in the interest of public safety and according to RCSA § 16-50j-57(b) do not constitute a substantial environmental effect.

1. Strain Bus Upgrades

UI has finalized future plans to upgrade the transmission lines along the railroad corridor entering Devon Tie Switching Station. An engineering analysis has indicated that once the transmission lines are upgraded, the strain bus at Devon Tie will become a limiting element in the transmission line path. To address this issue, the existing strain bus will be replaced with strain bus conductors which meet the rating needs of the new transmission lines.

2. Short Circuit Adequacy Upgrades

Short circuit analysis results indicate the need to replace two aluminum bus sections with aluminum bus one inch larger in diameter than the existing installation, in order to comply with short circuit stress requirements. UI will replace the identified bus sections as required. One side

of these bus sections terminate on existing capacitor voltage transformers ("CCVT"). The replacement bus design shall include additional bus supports prior to connecting the new bus to the existing CCVT's.

3. Phase to Phase Clearances

Three individual horn gap type line switches are mounted with a phase spacing of 93 inches and do not meet current phase to phase clearance requirements. This issue will be addressed by physically moving the outer phase switches further apart by approximately 8 inches to accommodate the required spacing required between the three switches.

4. Grounding

Computer modeling of the existing grounding system at Devon Tie Substation indicates that the grounding system does not meet the safety requirements of the IEEE Std-80. UI has identified and will implement the following grounding system enhancements:

- Install five ground wells around the perimeter of the substation to a depth necessary to adequately ground the system. Alternatively, UI can install additional copper grounding wires within the site. At present, UI and its consultants are determining which of these two methods will prove the most effective and efficient. The grounding modifications are needed to ensure accurate operation of control room equipment and safety to the outside public and workers inside the substation during fault conditions.
- Install eight copper coated steel ground rods.
- Install down-lead conductors along three wood light poles currently located within the substation.

5. Switching Transients

Control room equipment failure during switching at Devon Tie was also investigated by UI. The investigation concluded that transient voltages during switching were the root cause of these failures. UI will mitigate this issue by installing grounding resistors that will be connected between the gas circuit breaker bushings and the ground grid on each breaker.

6. Component Assessment

A substation component assessment conducted by UI concluded that the power source for yard area lighting needs to be relocated. UI will move the power source for the yard lighting to a location inside the substation. It was also identified that the aging task lights within the substation need to be relocated and updated with new, higher wattage fixtures. UI will relocate and install new task light fixtures as needed to provide the necessary illumination for working in low light conditions.

<u>Compliance with R.C.S.A. § 16-50j-57(b)</u>

As stated above, pursuant to R.C.S.A. § 16-50j-57, UI believes that the proposed changes do not constitute a modification to an existing facility that may have a substantial adverse environmental effect and is exempt from the requirement to obtain a certificate pursuant to Section 16-50k of the

Connecticut General Statutes. Specifically, consistent with § 16-50j-57(b), the proposed changes to the existing site do not:

(A) Extend the boundaries of the site beyond the existing fenced compound;

(B) Increase the height of existing associated equipment;

(C) Increase noise levels at the site boundary by 6 decibels or more, or to levels that exceed state and local criteria;

(D) Manage electric and magnetic field levels at the site boundary in a manner that is inconsistent with the Council's Best Management practices for Electric and Magnetic Fields at the site boundary;

(E) Cause a significant adverse change or alteration in the physical or environmental characteristics of the site; or

(F) Impair the structural integrity of the facility, as determined in a certification provided by a professional engineer licensed in Connecticut, where applicable.

UI intends to initiate the work on or after the Council's acknowledgement that the proposed activities are exempt.

Do not hesitate to contact me at (203) 499-2864 should you have an questions regarding this notice.

Very truly yours,

James R. Morrissey
Attorney
UIL Holdings Corporation
As Agent for The United Illuminating Company

Enclosure

cc: Mayor Benjamin Blake, City of Milford
Melanie Bachman, Esq., Connecticut Siting Council

Proof of Service

The undersigned hereby certifies, in accordance with Regulations of Connecticut State Agencies ("R.C.S.A.") § 16-50j-58, that this Notice of Exempt Modification was sent by FedEx on November 19, 2015 to the chief elected official of the City of Milford, Connecticut.

By: 

James R. Morrissey
Attorney
UIL Holdings Corporation
As Agent for The United Illuminating Company