

UIL Holdings Corporation  
157 Church Street  
P.O. Box 1564  
New Haven, CT 06506



Via Hand Delivery and Electronic Mail

March 16, 2015

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

Re: Petition No. 1120 – The United Illuminating Company Petition for a Declaratory Ruling that no Certificate of Environmental Compatibility and Public Need is Required for the Proposed Modifications to the Hawthorne Substation at 180 Hawthorne Drive, Fairfield, Connecticut

Dear Chairman Stein:

Please find enclosed the original and fifteen (15) copies of The United Illuminating Company's ("UI") responses to the Siting Council's Second Set of Interrogatories, dated February 18, 2015 in connection with the above-referenced Petition. Additionally, UI will electronically file all responses and attachments via [siting.council@ct.gov](mailto:siting.council@ct.gov).

If you have any questions concerning this submittal, please contact me at your convenience.

Very truly yours,

Bruce L. McDermott  
Managing Counsel – Operations  
UIL Holdings Corporation  
As Agent for The United Illuminating Company

cc: Service List (via electronic mail only)

Enclosures

Interrogatory CSC-II-1

The United Illuminating Company

Witness: Matthew Cloud  
Ron Rossetti

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Q-CSC-II-1: Please provide a map depicting the abutting properties to the substation. Include property owner and address information.

A-CSC-II-1: See Attachment CSC-II-1-A, Abutting Properties Map

Interrogatory CSC-II-2

The United Illuminating Company

Witness: Matthew Cloud  
Ron Rossetti

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Q-CSC-II-2: Please explain any increase/decrease in magnetic field levels around the perimeter of the substation as a result of the modifications.

A-CSC-II-2: UI is currently undertaking an analysis of the Electric and Magnetic Fields (EMF) generated by the substation and adjacent transmission lines for existing and future conditions after the proposed equipment addition. That analysis is expected to be completed by March 24<sup>th</sup> and will be documented in a formal report to be filed with the Connecticut Siting Council.

Interrogatory CSC-II-3

The United Illuminating Company

Witness: Matthew Cloud  
Ron Rossetti

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Q-CSC-II-3: Describe existing substation operational noise and any additional noise resulting from proposed substation modifications. Would the noise levels associated with the proposed modifications meet applicable State Noise Control Regulations?

A-CSC-II-3: UI is currently undertaking an analysis of the noise impacts of the proposed equipment modification as well as adherence to local and state noise ordinances. This analysis is expected to be completed by March 24<sup>th</sup> and will be documented in a formal report to be filed with the Connecticut Siting Council.

Interrogatory CSC-II-4

The United Illuminating Company

Witness: Matthew Cloud  
Ron Rossetti

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Q-CSC-II-4: In regards to UI's response to Council Interrogatory No. 8 (dated December 30, 2014), the Site Plan lists the distance to the nearest residence as 155 feet. Is this distance from the parcel boundary or the fence line? What is the address of this property?

A-CSC-II-4: The 155 feet indicated on the Site Plan Drawing of Attachment D referenced in UI's response to Council Interrogatory No. 8 is measured from the parcel boundary to the nearest residence. The distance from the proposed fence line to the nearest residence is approximately 173 feet. The residence referenced in both distances is located at 172 Schiller Road.

## Interrogatory CSC-II-5

The United Illuminating Company  
Petition 1120

Witness: David Bradt  
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Q-CSC-II-5: Please elaborate on the N-1-1 conditions terminology mentioned on page 9 of the petition. Is this UI's own contingency planning or is it a standard/recommendation by another entity?

A-CSC-II-5: UI and all New England transmission owners are required to plan and design their transmission system's to meet national and regional reliability standards defined by the NERC, NPCC and ISO-NE governing entities. These reliability standards specifically define the types of system contingencies (or unplanned events) that the transmission grid must be able to endure without compromising system reliability.

The contingencies used in the description above are *generally* classified into two groups which include:

N-1 events or those representing a single initiating cause (e.g. lightning strike, tree contact, etc.).

N-1-1 events or those representing two separate initiating causes, with a short time period in between (30 minutes or longer). An example may be of an N-1 event as described above followed by another different N-1 event 30 minutes (or more) later.

UI and all New England Transmission owners have a compliance obligation to ensure our respective transmission systems are designed to appropriately tolerate these standard contingencies without violating reliability standard performance requirements. For these reasons UI has a compliance obligation to report identified deficiencies along with a required corrective action plan.

Interrogatory CSC-II-6

The United Illuminating Company  
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Witness: David Bradt  
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Q-CSC-II-6: Are there other alternatives to this project to meet the identified electric demand?

A-CSC-II-6: UI's alternative evaluation concluded that the proposed capacitor bank project at Hawthorne Substation was the most technically effective, practical, and cost-effective solution to meet our reliability compliance obligations to the New England Bulk Electric System.

The alternative site considered for the proposed capacitor banks was UI's Old Town substation in Bridgeport, also in a residential neighborhood. Hawthorne substation was chosen over the Old Town substation for the following reasons:

- The Hawthorne substation property can readily accommodate the proposed capacitor banks and provides the best technical system benefit when compared to the Old Town alternative.
- The Old Town substation site cannot accommodate the proposed capacitor banks without significant and costly modifications which would add years of delays to this project with an immediate need. Project delays would increase the reliability exposure to area customers which will continue to worsen as loads continue to grow until this project is in service.

Interrogatory CSC-II-7

The United Illuminating Company  
Petition 1120

Witness: David Bradt  
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Q-CSC-II-7: Would the proposed modifications meet long term electric demand or would other measures be required at this substation in the near future to meet projected load growth?

A-CSC-II-7: UI has no current plans for additional capacity upgrades at this substation in the ten year planning horizon. The proposed upgrade project is expected to provide significant long term capacity and reliability benefits to UI's customers in this area.



92 Hawthorne Drive	Keith L Cook & Nancy H Cook
112 Hawthorne Drive	Stephen P Stolarski
136 Hawthorne Drive	Mary R Skarzynski
160 Hawthorne Drive	Joseph G Almeida
254 Hawthorne Drive	Annette Herman
274 Hawthorne Drive	Louis Johnson & Stephanie Johnson
172 Schiller Road	Kenneth L Boda & Maureen G Boda
186 Schiller Road	Jason & Stacy Tournas
210 Schiller Road	Charlene Lebo
3135 Easton Turnpike	General Electric

**FOR ILLUSTRATION  
PURPOSES ONLY. NOT  
A SURVEY DRAWING**

**General  
Electric**

~38'

**92  
Hawthorne  
Dr.**

**112  
Hawthorne  
Dr.**

**136  
Hawthorne  
Dr.**

**160  
Hawthorne  
Dr.**

**210  
Schiller Rd.  
(Approx.)**

**186  
Schiller Rd.**

**172  
Schiller Rd.**

**274  
Hawthorne  
Dr.**

**254  
Hawthorne  
Dr.**