



VIA US AND ELECTRONIC MAIL

6/28/2017

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 56 Goffe St, New Haven CT ("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 56 Goffe St, New Haven CT ("Facility" or "Energy Facility"). The \$625 filing fees, along with 2 copies of this Notice of Exempt Modification, are enclosed herewith.

Existing Energy Facility

The Facility is located at 56 Goffe Street (AKA 60-80 Goffe Street) in the City of New Haven, CT at 41°18'51" N and Λ 72°56'2" W and is bounded as follows:

NORTH by Goffe Street, 354.65 feet;
EAST by land now or formerly of American Oil Co., 97.7 feet;
SOUTH by land now or formerly of Casher Brothers, Inc., 44.7 feet;
EAST again by land now or formerly of Casher Brothers, Inc., 34.68 feet;
SOUTH again by land or formerly of Mancel Inc., 145.53 feet;
WEST by land now or formerly of Evelyn Gibson, 45.0 feet;
NORTH again by land now or formerly of said Evelyn Gibson, 1.17 feet;
WEST again by land now or formerly of said Evelyn Gibson, 42.02 feet;
SOUTH again by land now or formerly of said Evelyn Gibson, and by land now or formerly of Alan C. Caplan, each in part, 103.03 feet;
WEST again by land now or formerly of Superior Springs, 172.33 feet.

Aerial Photo of the Facility



Broadway Substation (56 Goffe Street, New Haven, CT) Google Earth 2016

GIS Photo of the Facility



Broadway Substation (56 Goffe Street, New Haven, CT) GIS 2017

Proposed Modifications

UI is proposing to replace six (6) CCVT's at Broadway Substation. As the proposed modifications relate solely to improving system maintenance, the changes will not impact the existing Facility's structural capability or impact electric and magnetic fields or noise levels.



Photos showing the existing CCVT units and one of the junction boxes. Units are at the end of their lifespan. Pictures by UI 2017.

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

Pursuant to R.C.S.A. § 16-50j-57(b), the proposed changes do not constitute a modification to an existing facility that may have a substantial adverse environmental effect and are exempt from the requirement to obtain a certificate pursuant to Section 16-50k of the Connecticut General Statutes. Specifically, consistent with R.C.S.A. § 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) Impact 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;
- (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.

The project would not have a substantial adverse environmental effect or cause a significant adverse change or alteration in the physical or environmental characteristics because:

- (A) The proposed changes would be located within the Substation's existing fence line; the Substation's fenced area would not be expanded.
- (B) The equipment would be no taller than existing equipment within the Substation.
- (C) There would be no change to the existing television or radio interference resulting from the modifications of the Substation.
- (D) Sound-pressure levels at all points along properties lines would continue to meet state regulations set out in R.C.S.A. §§ 22a-69-1 et seq.
- (E) The project work would not affect water resource areas.
- (F) UI's review of the Connecticut Department of Energy and Environmental Protection's ("CT DEEP") Natural Diversity Data Base did not identify any state-listed endangered, threatened, or special concern species in the vicinity of the Project.
- (G) Electric and Magnetic field levels at the Substation boundary would not change as a result of the modifications.

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

Please do not hesitate to contact me at 203-499-2586 should you have any questions regarding this notice.

Very truly yours,



Amy Hicks
Analyst
The United Illuminating Company

cc: Mayor Toni Harp, City of New Haven

Attachment: Scope of Work

ATTACHMENT
SCOPE OF WORK



Scope Document CCVT Replacement Program - 2017

Date: **07/25/2016**



Project Name: CCVT Replacement

Project Number: 98-8689 SAP 801912

Sponsoring Area: EPE

Project Manager: Charles Wallis

Business Need

Many of the existing 115kV Coupling Capacitor Voltage Transformer (CCVT) and Potential Transformer (PT) devices on the UI system are old and unsupported by the original manufacturer. Several of these models have been known to leak insulating oil from the neutral bushings or secondary connection box and contain polychlorinated biphenyls (PCB's). In September of 2013 an ABB PCA 8 failed on the 9500 Line at Water Street Substation requiring an emergency replacement. It is recommended that these instrument transformers be replaced based on both risk of failure and opportunity for outages. The replacement of 16 CCVTs is planned as part of the 2016 Replacements.

Program Need

This project is needed in order to prevent both the failure of instrument transformers as well as any potential environmental problems that could be associated with the PCB's in the insulating oil. Failure of these devices can lead to unplanned outages as they are used for relaying and metering purposes.

System Maintenance has identified 123 single phase units that are candidates for replacement. These were selected based on age, historical problems with the model type, a potential presence of PCB's in the insulating oil, and they are all unsupported by their original manufacturer. Since replacements will require scheduled outages, it is best that units be replaced in conjunction with other projects to limit the overall number of outages required.



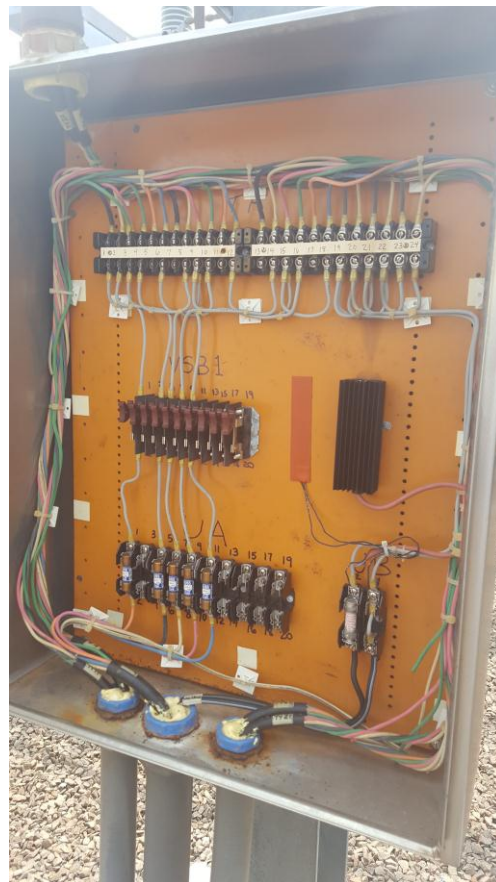
Project Description

Engineering and Permitting for the following substations:

Broadway:

Need: The CCVT's at Broadway Substation are ABB Type PCA-8. These devices are approximately 25 years old. This particular model type of CCVT has proven problematic over the years with a large number of failures on the UI system. The most recent failures have been on the 9500 line at Water Street Substation.

Solution: Replace six (6) CCVTs with new CCVTs on the existing structures using adaptor plates to match the bolt patterns. All of the CCVTs will have the same secondary voltage ratio as existing. Three (3) of the CCVT's will be designated to 9500-36B-1H and three (3) will be designated to 9502-36B-1H. Due to water intrusion from the conduit being connected to the top of the junction box, the VSB box as-well-as all above grade conduit and control cable will be replaced. All work is assumed to be completed by UI personnel. UI crews will test the CCVTs and wire the junction boxes prior to energizing.





Alternatives

Since the aging CCVTs are unsupported by the original manufacturer, the only alternative to replacing them proactively is running them to failure. This will present a risk for negative environmental impacts as well as impact system reliability. Since the selected devices are nearing or have exceeded their expected lifetime of 40 years, show significant signs of deterioration, and are of a model types that have proven problematic in recent years, it is only a matter of time before failure occurs. Replacement is the only solution that aligns with UI's goal of providing reliable service for our customers.

Deliverables Include:

1. Complete Design Package including updated one-line, site plans, substation arrangement plan, sections and details.
2. Equipment & Material specifications
3. Shop Drawing review
4. Construction & installation of new equipment.
5. Removal & disposal of old equipment
6. As-Built drawings

Line Outages:

1. Line as required for CCVT replacements
2. Paired up with on-going Transmission Projects (Sackett Transmission Upgrades)

Scope Limitations

Only the replacement of the devices identified by System Maintenance will be included in the scope of work for this project, along with the associated junction boxes and conduit if they are identified to be deteriorated. After a bid has been completed for the devices and the dimensions are known, minor structural modifications may need to be made in order to complete the replacements and should be considered as part of the scope of work for this project. Further structural improvements, such as increasing the height of a structure to meet proper safety clearances, will also be included as part of the scope of work. Relocating structures in the yard for instrument transformers will only be included in this project if it will drastically improve accessibility in the yard for operating purposes (i.e. Mobile Substation Access). These additional requirements will be evaluated on a case by case basis and identified during the design process.