

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 www.ct.gov/csc

CERTIFIED MAIL RETURN RECEIPT REQUESTED

December 7, 2018

Bruce L. McDermott, Esq. Murtha Cullina LLP 265 Church Street New Haven, CT 06510

RE: **PETITION NO. 1353** - The United Illuminating Company petition for a declaratory ruling pursuant to Connecticut General Statutes §4-176 and §16-50k for the proposed modifications to the existing Seaview Tap Substation located at 1677 Seaview Avenue, Bridgeport, Connecticut.

Dear Attorney McDermott:

At a public meeting held on December 6, 2018, the Connecticut Siting Council (Council) considered and ruled that the above-referenced proposal would not have a substantial adverse environmental effect, and pursuant to Connecticut General Statutes § 16-50k, would not require a Certificate of Environmental Compatibility and Public Need, with the following conditions:

- 1. Approval of any minor project changes be delegated to Council staff;
- 2. Unless otherwise approved by the Council, if the facility authorized herein is not fully constructed within three years from the date of the mailing of the Council's decision, this decision shall be void, and the facility owner/operator shall dismantle the facility and remove all associated equipment or reapply for any continued or new use to the Council before any such use is made. The time between the filing and resolution of any appeals of the Council's decision shall not be counted in calculating this deadline. Authority to monitor and modify this schedule, as necessary, is delegated to the Executive Director. The facility owner/operator shall provide written notice to the Executive Director of any schedule changes as soon as is practicable;
- 3. Any request for extension of the time period to fully construct the facility shall be filed with the Council not later than 60 days prior to the expiration date of this decision and shall be served on all parties and intervenors, if applicable, and the City of Bridgeport;
- 4. Within 45 days after completion of construction, the Council shall be notified in writing that construction has been completed;
- 5. The facility owner/operator shall remit timely payments associated with annual assessments and invoices submitted by the Council for expenses attributable to the facility under Conn. Gen. Stat. §16-50v;
- 6. This Declaratory Ruling may be transferred, provided the facility owner/operator/transferor is current with payments to the Council for annual assessments and invoices under Conn. Gen. Stat. §16-50v and the transferee provides written confirmation that the transferee agrees to comply with the terms, limitations and conditions contained in the Declaratory Ruling, including timely payments to the Council for annual assessments and invoices under Conn. Gen. Stat. §16-50v; and



7. If the facility owner/operator is a wholly owned subsidiary of a corporation or other entity and is sold/transferred to another corporation or other entity, the Council shall be notified of such sale and/or transfer and of any change in contact information for the individual or representative responsible for management and operations of the facility within 30 days of the sale and/or transfer.

This decision is under the exclusive jurisdiction of the Council and is not applicable to any other modification or construction. All work is to be implemented as specified in the petition dated October 19, 2018 and additional information received on November 19, 2018 and November 28, 2018.

Enclosed for your information is a copy of the staff report on this project.

Sincerely,

Robert Stein Chairman

RS/MP/lm

Enclosure: Staff Report dated December 6, 2018

c: The Honorable Joseph P. Ganim, Mayor, City of Bridgeport Kimberly G. Staley, Chief Administrative Officer, City of Bridgeport Thomas F. Gill, Director of Planning & Economic Development, City of Bridgeport S. MeeNa Cullen-Corson, The United Illuminating Company Nicholas J. Cicale, Esq., UIL Holdings Corporation



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Petition No. 1353
The United Illuminating Company
Seaview Tap Substation, Bridgeport, Connecticut
Staff Report
December 6, 2018

Introduction

On September 13, 2017, The United Illuminating Company (UI) submitted a Notice of Exempt Modification¹ to install grounding conductors and ground rods within the existing fenced yard of the Seaview Tap Substation (STS) located at 1677 Seaview Avenue in Bridgeport, Connecticut. Such modifications were proposed per the Institute of Electrical and Electronic Engineers (IEEE) Standard 80 - IEEE Guide for Safety in AC Substation Grounding (IEEE Standard 80). On October 2, 2017, the Council acknowledged UI's notice of exempt modification.

On October 19, 2018, the Connecticut Siting Council (Council) received a petition² (Petition) from UI for a declaratory ruling pursuant to Connecticut General Statutes §4-176 and §16-50k for additional proposed modifications to the existing STS in Bridgeport.

Notice of the Petition was provided in accordance with the provisions of the Regulations of Connecticut State Agencies §16-50j-39. To date, the Council has not received any comments regarding the Petition filing. The Council issued interrogatories to UI on October 26, 2018. On November 16, 2018, the Petitioner submitted responses to Council interrogatories.

Proposed Project

UI's STS was originally constructed in the 1960s. The STS site is located within the City of Bridgeport's Industrial Light (I-L) Zone. To the north of STS is Barnum Avenue. Crescent Avenue and the Metro-North Railroad tracks are located to the south. To the west of STS is City of Bridgeport property that contains wetlands with a creek running in a north-south direction. Directly abutting to the east is General Electric (GE) property, and on the opposite side of Seaview Avenue is property owned by Lacey Manufacturing Holding Company LLC.

According to the IEEE Standard 80, the safe grounding of substations is critical to providing a means to direct electrical currents from equipment into the earth under both normal and fault conditions without exceeding any operational limits or adversely impacting electrical service and also to prevent the exposure of persons in the vicinity of the substation to dangers associated with critical electrical shock. Based on a recent engineering study conducted by UI, changes in the transmission system topography, and the evolution of industry standards surrounding substation grounding, UI recognizes the need to undertake the proposed project. Specifically, the proposed project would further protect UI's substation equipment, the electrical system, and most importantly, the public by eliminating the risk of hazardous step³ and touch⁴ potentials in the vicinity of STS that exist during certain electrical ground fault conditions at STS. This project is not identified on the ISO-New England Inc. (ISO-NE) Regional System Plan (RSP) Project List or the ISO-NE Asset Condition List.

¹ Under the Regulations of Connecticut State Agencies §16-50j-57(b)(2)(A), exempt modification work must not extend the boundaries of the site beyond the existing fenced compound.

² UI filed a petition because the proposed grounding work would extend beyond the existing fenced area.

Step potential is the difference in surface potential experienced by a person bridging a distance of one meter with his or her feet without contacting any grounded object.

⁴ Touch potential is the potential difference between the ground potential rise and the surface potential at the point where a person is standing while at the same time having a hand in contact with a grounded structure.

Specifically, UI proposes to bury 4/0 copper grounding conductor and ground rods outside the STS fence line on the east and west sides of STS⁵, with additional proposed ground conductor along the northern limits of the site. Approximately 180 feet of ground conductor would be installed on the west side of STS; 290 feet would be installed on the east side of STS; and approximately 160 feet would be installed parallel to Barnum Avenue near the northern limits of the property. The total would be about 730 feet, which includes the amount of conductor required to connect the ground conductors to be installed outside of the substation to the existing ground grid inside the fenced substation. The new grounding conductor along the east and west fenced sides of the substation would be covered with crushed rock, roughly six inches deep.

Two sections of linear fence at the STS site would be replaced with fence isolation sections. Specifically, UI would also install two, 30-foot long isolation panels on the fence posts. One would be located along the northwestern limits of the project area (and parallel to Barnum Avenue), and one would be located along the southeastern limits of the project area (and parallel to Seaview Avenue). UI would isolate the fence posts throughout the section, capping them with polyvinyl chloride (PVC) sleeves in the foundation.

Approximately 125 linear feet of new fence is required on the eastern portion of the project due to the deterioration of the existing fence. All fence work (including the isolation fence) would match the height and construction of the existing fence, i.e. six-feet tall with barbed wire.

The western portion of the work would extend onto City of Bridgeport (City) property. Due to recent rain events, UI is also looking to install some concrete blocks to retain the soils in this area. UI would work with the City to install both the grounding work and the concrete blocks.

Existing traffic signal equipment is located near the intersection of Barnum Avenue and Seaview Avenue; however, UI's proposed 160 feet of new conductor to be located parallel to Barnum Avenue would not affect the use of this equipment. Notwithstanding, UI has consulted with the City Engineer, and such work would require a permit from the City.

The fence work and all eastern portions of the grounding work would be located on GE property. UI has received an access agreement from GE to perform this work.

Environmental Effects and Mitigation Measures

Vegetative clearing would be minimal as most work is at or close to the existing fence lines.

All work would be located in an upland area. The nearest wetland and watercourse are off-site and located approximately 10 feet and 25 feet, respectively, to the west of the proposed construction area. UI would install erosion and sedimentation controls (e.g. silt fence) immediately west of the construction area to protect the adjacent wetland and watercourse resources. These mitigation measures would be consistent with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control.

The existing substation is located outside of the 100-year flood zone, but within the 500-year flood zone. Flood elevation would not be concern for the limited nature of this grounding project.

There are no known Aquifer Protection Areas in the City of Bridgeport as designated by the Connecticut Department of Energy and Environmental Protection (DEEP).

The proposed project would not be located within the shaded area of the DEEP Natural Diversity Database (NDDB Area). The nearest NDDB Area is located 0.73 miles to the southwest of the proposed project.

⁵ Drawing 24203-400 was received on November 16, 2018 and is attached. It incorrectly shows north as "up." Council staff notes that, on that drawing, west is "up."

Petition 1353: Seaview Tap Substation Page 3

If contaminated soil is discovered during excavation, UI would categorize and dispose of such contaminated soil according to all applicable statutes and regulations.

The proposed project is not expected to impact historic or cultural resources.

Visual impacts associated with the project would not be expected to be significant. Grounding conductor would be buried, and all proposed fence work would be similar in height and appearance for visual consistency.

The proposed project would comply with DEEP noise control standards. Noise levels associated with construction would be temporary and typical of construction activities. Such construction noise would also be exempt per DEEP noise control standards.

The proposed project would not impact electric or magnetic fields.

Construction

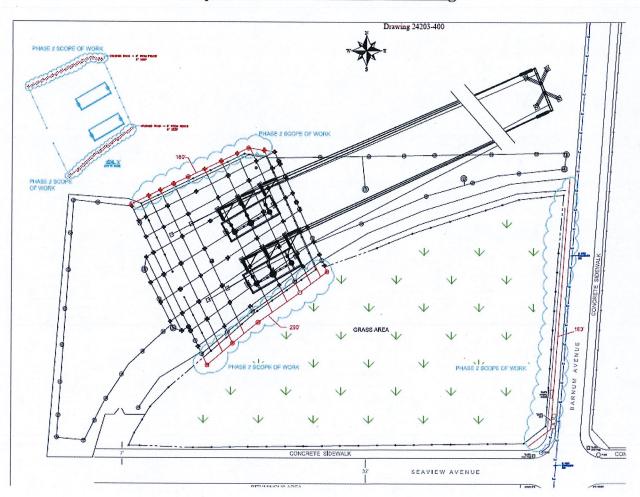
In general, work hours would be from 7 AM to 4 PM Monday through Friday with additional hours scheduled on an as needed basis in the event of emergency or exceptional circumstances.

Staff Recommendations

Staff recommends the following:

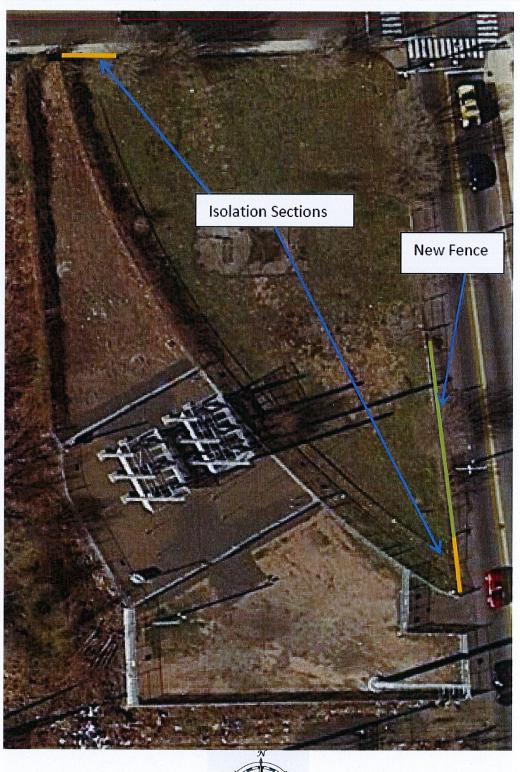
1. Approval of any minor project changes be delegated to Council staff.

Proposed Substation Modifications Drawing





Proposed Fence Locations





Wetland Drawing

