



# STATE OF CONNECTICUT

## CONNECTICUT SITING COUNCIL

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### CERTIFIED MAIL

### RETURN RECEIPT REQUESTED

July 24, 2017

Amy Hicks  
United Illuminating Company  
180 Marsh Hill Road  
Orange, CT 06477

**RE: PETITION NO. 1304** – The United Illuminating Company petition for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the proposed Stratford 115-kV Transmission Line Upgrade Project consisting of the removal and relocation of northern and southern sections of existing 115-kilovolt (kV) transmission line structures from Connecticut Department of Transportation (ConnDOT) catenary structures within the Metro-North Railroad corridor to new 115-kV transmission line structures to be located within the existing ConnDOT right of way and upgrade of 115-kV conductors extending approximately 1.9 miles from UI's Baird Substation to just west of the Housatonic River in Stratford, Connecticut, and related substation improvements.

Dear Ms. Hicks:

At a public meeting held on July 20, 2017 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. The United Illuminating Company provide an invasive species control plan to the Council;
2. Approval of any minor project changes be delegated to Council staff;
3. A copy of the U.S. Army Corps of Engineers Form be provided to the Council;
4. If construction commences after July 27, 2018, UI shall file an updated DEEP NDDB determination letter with the Council including any applicable wildlife protective measures;
5. A copy of any required notices to the Federal Aviation Administration shall be provided to the Council;
6. 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;
7. 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 Town of Stratford.

8. Within 45 days after completion of construction, the Council shall be notified in writing that construction has been completed;
9. 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;
10. 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
11. 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 June 2, 2017 and additional information received July 10, 2017.

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

Very truly yours,

A handwritten signature in blue ink that reads "Robert Stein" with "MAB" written in smaller letters to the right of "Stein".

Robert Stein  
Chairman

RS/MAB/MP/bm

Enclosure: Staff Report dated July 20, 2017

c: The Honorable John A. Harkins, Mayor, Town of Stratford  
Jay Habansky, Planning & Zoning Administrator, Town of Stratford  
James Morrissey, Esq., United Illuminating Company



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### Petition No. 1304

**The United Illuminating Company**

**Stratford, Connecticut**

### Staff Report

**July 20, 2017**

### Introduction

On June 5, 2017, the Connecticut Siting Council (Council) received a petition (Petition) from The United Illuminating Company (UI) for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for proposed modifications to two existing overhead 115 kilovolt (kV) transmission lines that connect Baird Substation and Barnum Substation in Stratford, Connecticut. Council member Robert Silvestri and Council staff member Michael Perrone conducted a field review of the proposed project on July 10, 2017. James Morrissey, Attorney, UIL Holdings Corporation (UIL); Jeff Bausch, Intern, UIL; MeeNa Cullen Corson, Engineer, UI; Amy Hicks, Analyst – Permitting & Public Outreach, UI; James Yeske, Project Manager, UI; and Shawn Crosbie, Environmental, UIL also attended the field review.

The proposed project is needed to increase the thermal capacity and reliability of the two transmission lines in accordance with the 2011 Southwest Connecticut Needs Assessment Report (SWCTNA). The SWCTNA is a study completed by UI, The Connecticut Light and Power Company d/b/a Eversource Energy (Eversource), and ISO-New England Inc. (ISO-NE) to evaluate the reliability of the southwest Connecticut area in terms of meeting the North American Electric Reliability Corporation (NERC), Northeast Power Coordinating Council (NPCC), and ISO-NE standards and criteria. This study identified transmission reliability needs related to capacity limitations, unacceptable voltage performance and high short circuit current levels. To meet reliability needs, the existing 1272-kcmil aluminum conductor steel reinforced (ACSR) conductors would be replaced with larger capacity 1590-kcmil aluminum conductor steel supported (ACSS) conductors. The proposed project is identified on the June 2017 ISO-NE Regional System Plan Project List.

The proposed project would involve two existing 115-kV UI transmission lines mounted on top of existing Metro North Railroad (MNRR)/Connecticut DOT (CDOT) lattice catenary structures that span the railroad. The transmission lines, one on the north side and one on the south side of the catenaries, are mounted on metal support “bonnets” that were installed during the early 1940s. Some of the catenary structures are over 100 years old. The majority of the catenary structures range in height from 55 feet to 87 feet, with a typical height of 57 feet. Due to their age and physical limitations, the existing transmission line support structures are structurally inadequate to support the new higher capacity conductors.

UI would install the higher capacity conductors on new galvanized steel monopoles adjacent to the railroad, 15 to 20 feet to the north and south of the existing centerlines on the catenaries. The relocation of UI’s transmission facilities farther away from the MNRR’s equipment would allow for inspection and maintenance without necessarily requiring MNRR feeder/signal/track outages. The transmission line modification project, extending from Baird Substation, past Barnum Substation, to the west of the Housatonic River, would have a total distance of about 1.9 miles.



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Affirmative Action / Equal Opportunity Employer

The conductors would be installed in a vertical configuration. For the northern line, 31 steel bonnets would be replaced with 31 new monopole structures, and one substation take-off structure would be replaced with another tubular steel monopole. For the northern line, the proposed structures would range in height from about 85 to 110 feet, with a typical height of 90 feet. For the southern line, 32 steel bonnets would be replaced with 30 new monopole structures, and three substation take-off structures would be replaced by two tubular steel monopoles. The proposed structures for the northern line would range in height from about 85 to 135 feet, with a typical height of 95 feet.

The proposed transmission structures would be designed to support a future conductor upgrade to 2156-kcmil ACSS if the need should ever arise. However, UI has determined that the additional cost to utilize 2156 kcmil versus the proposed 1590 kcmil cannot be justified at this time.

UI would utilize drilled pier foundations for both the northern and southern transmission line structures.

The bonnets that current support UI's transmission lines would be removed. The lower, lattice portions of the catenary structure that supports the bonnets would remain in place because they support MNRR lines.

The typical width of the railroad right-of-way (ROW) is approximately 110 feet but varies significantly depending on location. Most of the new monopoles would be located within the existing railroad ROW. However, approximately eight of the structures (i.e. four for the northern line and four for the southern line) would require off-ROW permanent easements.

### **Construction Methods**

UI would register the project under the Connecticut Department of Energy and Environmental Protection's (DEEP) General Permit for the Discharge of Stormwater and Remediation Wastewaters from Construction Activities and would submit a Stormwater Pollution Control Plan (SWPCP) outlining UI's approach for managing erosion and sedimentation controls (E&S controls) during construction. UI's E&S controls would be installed in accordance with the SWPCP and the *2002 Connecticut Guidelines for Soil Erosion and Sediment Control*. Typical E&S controls include, but are not limited to, the silt fence, hay/straw bales, silt blankets, check dams, water bars, drainage swales, etc.

UI would perform tree clearing on select portions of both the northern and southern portions of the ROW to clear overgrowth from the locations for the new structures and to provide unobstructed access to structure locations, provide access between existing access roads and new structure locations and to maintain required NERC clearances. UI has obtained rights for transmission lines, including the right to clear vegetation within the full-defined limits of the CDOT ROW, and, to the extent that rights exist, to remove any tree or portion of a tree outside of the ROW that could be deemed a "danger tree." If any additional clearing is required on private property, UI would obtain the owner's approval. UI would minimize vegetation clearing activities to the extent possible and would stabilize any areas disturbed by vegetation clearing as soon as practical. UI estimates that approximately 8.43 acres of vegetation would need to be cleared to safely construct and install all foundations and structures.

UI would need to build both temporary access roads and work pads in order to permit safe passage and implement work practices. Through the construction of the access roads and work pads, UI would trim and remove vegetation, install E&S controls, flatten un-level ground and excavate areas as necessary. Temporary access roads would consist of gravel (e.g. 1-1/4" stone), which would be removed upon project completion. To minimize the footprint of construction, UI's access roads would be no greater than 16 feet in width. In the event that UI has to construct temporary access through a wetland or a regulated area, these access roads would not exceed 12 feet in width, unless safety issues and certain large equipment necessitate wider access. UI would also utilize existing access where available. Existing paved access would not require upgrades. Existing non-paved access may require upgrades with gravel.

UI's work pads would range from 900 square feet to up to 9,500 square feet in area. Work pads would vary in size due to certain types of equipment needed and obstructions and/or grading challenges.

Construction of this project would not commence until after the replacement Baird Substation is in service. The replacement Baird Substation is currently under construction and has an estimated in-service date of May 2018. UI anticipates beginning construction for the proposed project in the third quarter of 2018, beginning with access road preparation and ROW vegetation clearing. The proposed project has a planned in-service date of December 31, 2019. Typical work hours would be Monday through Saturday 8:00 a.m. to 5:00 p.m. For certain MNRR outages, contractors would need to work at night, typically, 8:00 p.m. to 6:00 a.m. Sunday work hours are possible, but there are no plans to work on Sundays, except for wire pulling during a four-track outage, which is only granted by MNRR during Friday and Saturday nights (which could run into Sunday morning).

### **Environmental Effects and Mitigation Measures**

By letter dated July 27, 2016, the Connecticut Department of Energy and Environmental Protection (DEEP) notes that, per its review of the Natural Diversity Database (NDDB), no negative impacts to State-listed species are expected to result from the proposed project. Council staff notes that DEEP's NDDB determination expires on July 27, 2018. If the project is approved, Council staff suggests including a condition that, should construction commence after July 27, 2018, UI shall file an updated DEEP NDDB determination letter with the Council and any applicable wildlife protective measures.

According to the U.S. Fish and Wildlife Service, two federally-listed species may occur or could be potentially affected by activities within the project area. The red knot is a federally-designated Threatened migratory shorebird that requires marsh or mudflat habitat. However, given the lack of marsh and mudflat habitat within the immediate vicinity of the project, it is unlikely that the red knot occurs within the project area. The northern long-eared bat (NLEB) is a federally-designated Threatened Species and State-designated Endangered Species. Potential habitat for the NLEB exists north of the railroad tracks and south of Knowlton Street where forest is present. However, the proposed project clearing is not expected to adversely impact the potential habitat for the NLEB.

Heritage Consultants, LLC (Heritage) performed an assessment of archaeological resources along the reconductoring route. A review of environmental characteristics, historic maps and aerial images, and previously recorded cultural resources was used to assess the potential for the proposed project corridor to contain intact subsurface deposits. Given the substantial amount of development within the proposed areas and the large number of previous disturbances, it is highly unlikely that intact soil deposits remain. Therefore, Heritage notes that no further archaeological investigation of the proposed structure locations is warranted. By letter dated June 30, 2017, the Connecticut State Historic Preservation Office (SHPO) determined that the proposed project would have no adverse effect on historic properties.

There would be temporary impacts to approximately 7,400 square feet of wetlands as a result of the placement of swamp mats for the safe construction of work pads and/or access roads. Along with these temporary impacts, UI would also cut approximately 20,150 square feet of wetland vegetation to grade. However, UI would not perform any type of grubbing nor fully remove the wetland vegetation in order to minimize any secondary impacts to these areas. To facilitate the reforestation or regrowth of wetland vegetation, UI would seed such affected areas with New England Wetmix, a wetland seed mix.

Based on the square footage of the temporary wetland impacts, UI would apply for the U.S. Army Corps of Engineers (ACOE) Self-Verification Form (ACOE Form) under Connecticut's Programmatic General Permit. If the project is approved, Council staff suggests that a copy of the ACOE Form be provided to the Council.

During late June 2016, UI's consultant, BL Companies, Inc., assessed the project area for the presence of vernal pools and amphibian habitat breeding areas along with its wetland investigations. However, due to the moderate drought conditions at that time, areas deemed to be potential vernal pools were re-evaluated in April 2017. During such follow-up survey, it was determined that there are no vernal pools in the investigation area.

Six proposed transmission structures would be located within the 100-year flood zone. This is because the allowable span length limits the location of the structures to these areas. However, the foundations are designed so that the top of the drilled pier foundation would be located approximately 6 inches above the 100-year flood zone elevation.

There are no DEEP-designated Aquifer Protection Areas within the Town of Stratford.

To the north of the MNRR ROW (and roughly opposite Home Depot and Walmart to the south) is the former Raymark Industries site, which is considered a United States Environmental Protection Agency (EPA) Superfund site (Superfund Site) with contamination including, but not limited to, asbestos. While not in the Superfund Site, UI's construction on the northern transmission line would be in the vicinity of the Superfund Site, particularly the locations of proposed Structure Nos. 825N through 854N.

In late 2016, UI and its consultant Fuss & O'Neil retrieved groundwater samples from multiple temporary monitoring wells installed on both the north and south sides of the ROW in Stratford. Based on the results of the groundwater samples and proposed depths of the foundations required for the proposed transmission structures, all excavated material from the proposed project would be managed in accordance with the Connecticut Guidelines for Solid Waste Management. The majority of material generated from the project would be live loaded and removed from the MNRR ROW and sent for disposal. Any material that must be stored at work sites would be stockpiled within a hay-bale corral and covered by poly/plastic until removed from the site and transported to a permitted facility. All spoils would be managed in accordance UI's Soil and Groundwater Management Plan.

In addition to the results of the pre-characterization event identifying non-Hazardous Connecticut Regulated material, UI would manage a co-mingled waste stream of asbestos, polychlorinated biphenyls (PCBs) and hazardous concentrations of lead. Based on research conducted by UI in consultation with DEEP and EPA, this mix of contaminants is consistent with the Raybestos waste stream deposited around this area of Stratford. Therefore, UI would need to obtain an EPA ID number for the management, transportation and disposal of this material. UI would also conduct a remedial effort within this area to comply with the Toxic Substance Control Act 40 CFR 761.61 and RCRA clean-up methodologies.

UI would manage the wastewater/groundwater in accordance with DEEP's management for contaminated media. UI would also work with the Stratford Water Pollution Control Authority. Contaminated groundwater would be sent to a treatment facility for disposal.

UI would continue to consult with DEEP and EPA for guidance on the management of soil and groundwater during construction of the project.

The maximum predicted post-construction magnetic field level under average load conditions would be 66.3 milligauss (mG), a slight decrease from maximum existing (pre-construction) magnetic field level of 69.8 mG along the ROW northeast of Barnum Substation. This is far below the International Commission on Non-ionizing Radiation Protection acceptable exposure level of 2,000 mG for the general public as recognized in the Council's "Electric and Magnetic Field Best Management Practices for the Construction of Electric Transmission Lines in Connecticut."

Construction-related noise is exempt per DEEP noise control standards. Notwithstanding, any construction-related impacts to existing noise levels would be short-term and localized in the vicinity of work sites. Post-construction, the project would continue to comply with DEEP noise control standards.

The proposed project would not be expected to adversely impact the Connecticut Coastal Boundary as defined in Section 22a-94 of Connecticut General Statutes.

The proposed transmission structures would not require Federal Aviation Administration (FAA) marking or lighting. However, notice is required to be provided to FAA for both the proposed structures and temporary structures such as cranes. If approved, staff recommends that a copy of any FAA notices be provided to the Council.

Although the proposed project would result in increased heights of transmission line structures, in general, the area of visibility would not expand appreciably due to the presence of intervening urban development. Furthermore, the area has been historically occupied by the catenary structures, as well as surrounding industrial/commercial land uses and the infrastructure of the I-95 corridor. The vertical conductor configuration of the proposed monopoles would have a narrow visual profile. The galvanized steel finish would be visually consistent with structures already approved by the Council along the railroad ROW. Overall, the installation of taller galvanized steel monopoles would not be expected to substantially change the visual environment in the area.

#### **Municipal and abutter notice**

UI consulted with the Town of Stratford and also reached out to abutting property owners. By letter dated February 2, 2017, Mayor John Harkins of the Town of Stratford expressed support for the proposed project and noted the electric reliability benefits. Formal notice was provided to the Town of Stratford, the property owner, and abutting property owners on or about June 2, 2017.

UI has received inquiries and construction-related questions regarding the proposed project from approximately seven abutters, including, but limited to, Teresa Denning, St. John the Baptist Church and The Hudson Paper Company. The Council also received correspondence from Ms. Denning and representatives of St. John the Baptist Church and the Hudson Paper Company. UI has reached out to each abutter to respond to their questions and/or concerns. In its interrogatory responses dated July 7, 2017, UI provided an abutter outreach matrix with the specific details.

#### **Conclusion**

Staff recommends including the following conditions:

1. Approval of any minor project changes be delegated to Council staff;
2. A copy of the U.S. Army Corps of Engineers Form be provided to the Council;
3. If construction commences after July 27, 2018, UI shall file an updated DEEP NDDB determination letter with the Council including any applicable wildlife protective measures; and
4. A copy of any required notices to the Federal Aviation Administration shall be provided to the Council.