



# STATE OF CONNECTICUT

## CONNECTICUT SITING COUNCIL

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September 9, 2015

Bruce L. McDermott, Esq.  
Managing Counsel-Operations  
UIL Holdings Corporation  
157 Church Street  
New Haven, CT 06506

RE: **PETITION NO. 1120** – The United Illuminating Company declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the proposed modifications to the Hawthorne Substation located at 180 Hawthorne Drive, Fairfield, Connecticut. Development & Management Plan.

Dear Attorney McDermott:

At a public meeting of the Connecticut Siting Council (Council) held on September 3, 2015, the Council considered and approved the Development and Management (D&M) Plan submitted for this project on July 24, 2015 with the following condition:

- The petitioner adhere to the Department of Energy & Environmental Protection's letter dated November 14, 2014 regarding box turtle protection procedures, and that the weekly inspections are carried out by a state licensed/certified herpetologist.

This approval applies only to the D&M Plan submitted on July 24, 2015. Requests for any changes to the D&M Plan shall be approved by Council staff in accordance with Regulations of Connecticut State Agencies Section (RCSA) §16-50j-62(b). Furthermore, the project developer is responsible for reporting requirements pursuant to RCSA 16-50j-62.

This decision is under the exclusive jurisdiction of the Council and is not applicable to any other modification or construction.

Enclosed is a copy of the staff report on this D&M Plan, dated September 3, 2015.

Thank you for your attention and cooperation.

Sincerely,

Robert Stein  
Chairman

RS/RDM/lm

Enclosure: Staff Report dated September 3, 2015

c: Parties and Intervenors



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Petition No. 1120

The United Illuminating Company

Hawthorne Substation, Fairfield, Connecticut

Development and Management Plan

Staff Report

September 3, 2015

On June 25, 2015, the Connecticut Siting Council (Council) issued a Declaratory Ruling to The United Illuminating Company (UI) that no Certificate of Environmental Compatibility and Public Need is required for proposed modifications to the existing Hawthorne Substation located at 180 Hawthorne Drive, Fairfield, Connecticut. As required in the Council's Decision and Order, UI submitted a Development and Management (D&M) Plan for this project on July 24, 2015. Copies of the D&M Plan were provided to the Town of Fairfield, a party to the petition, and to the intervenors Arthur Tournas and Vincent Giandurco. Mr. Tournas submitted comments to the Council on August 24, 2015 requesting that the Council consider the construction of a concrete wall around the substation and a reduction of the number lightning masts. No other comments were received.

The existing Hawthorne Substation is a 115-kV to 13.8-kV substation located on a 2.8-acre parcel owned by UI. An Eversource transmission line right-of-way is located immediately south of the substation and contains two separate transmission lines, one of which is looped into the substation. Vehicular access to the substation is from a paved driveway extending from Hawthorne Drive.

The project includes the installation of two 20 megavolt ampere reactive capacitor banks and associated equipment, the realignment and replacement of existing substation fencing, installation of lightning masts to protect critical substation equipment, and the installation of security lighting.

The proposed capacitor banks and associated equipment is approximately 205 feet long and 26 feet high at their highest point, which is of similar height and design to that of existing substation equipment. To accommodate the proposed capacitor banks, UI will expand the existing substation yard to the south and west by approximately 24,170 square feet. The entire substation will be enclosed by a 14-foot high chain link fence. Consistent with the Council's decision, UI incorporated angled substation yard corners into the site design, where feasible.

Eight new 55-foot tall lightning masts will be installed within the substation yard. Substation lights will be mounted on lightning masts to illuminate the substation yard on an as needed basis. Only one LED light, oriented towards the substation gate, will remain on at night during normal substation operations.

To facilitate construction and the possible future delivery of a mobile transformer in the event of an emergency, UI will install 8,500 square feet of crushed stone surfaces in the northeast corner of the property, beyond the substation yard. This area will also serve as a construction laydown area that includes a construction office trailer and small equipment storage trailers. A temporary construction fence will be installed around the laydown area. Construction access to the site will utilize the existing paved access drive.

Expansion of the substation yard will require the removal of 40 trees of at least one-foot diameter at breast height. UI will notify the Council, the Town of Fairfield and abutters with written notice of the commencement of site clearing. After clearing and rough grading, non-suitable earth materials will be stockpiled on site and controlled with proper erosion control methods prior to off-site disposal. Dust control will be accomplished by the use of gravel surfaces and water suppression, when necessary. There will be no site blasting. Any rock that is encountered will be removed using backhoe mounted jackhammers.



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Grades in the substation expansion area are moderate and UI expects overall cut and fill to be fairly balanced although some fill may need to be brought into the site. All fill will be mechanically compacted to create an even subgrade. After the subgrade surface is finished, UI will apply herbicide to prevent future weed growth. The herbicide application will occur only during favorable weather conditions to prevent migration off-site. The finished substation yard surface will be composed of crushed rock, compacted to a thickness of six inches. Existing asphalt damaged during construction will be repaired upon completion of the project.

Consistent with the Council's decision, UI retained an independent professional to evaluate runoff from the site and incorporated the engineer's recommendation into the design of the site. Drainage measures include a new 15-inch diameter outflow pipe in the existing catch basin located in the substation access road to effectively manage increased flows down the driveway and implementation of specific construction best management practices to protect the wetland located north of the project site. UI has obtained a Department of Energy and Environmental Protection permit for construction stormwater discharge and dewatering.

Although UI submitted a box turtle protection program as part of the D&M, the program does not contain all of elements outlined in the Department of Energy and Environmental Protection's (DEEP) letter of November 14, 2014 submitted as part of the Petition 1120 Record (attached). DEEP's letter recommended procedures for construction work that occurs during the turtle's active period, between April 1 and September 30.

Staff recommends implementation of the procedures outlined in DEEP's November 14, 2014 letter, as well as weekly inspections of the project site during the turtle's active period by a State-certified herpetologist.

Typical construction hours are between 7:00 a.m. and 5:00 p.m., Monday through Friday. Under certain situations, such as work during related equipment outages, construction hours will increase to 24 hours a day, seven days a week. Quiet work within the existing control enclosure will extend beyond the typical Monday through Friday schedule. UI anticipates completing most of the substation expansion work and substation component construction by February 2016. Further testing and commissioning will follow with an anticipated completion date by May 2016. UI will submit written notice of project completion to the Council followed by a final report.

Although the Council has no jurisdiction over off-site landscaping, UI developed a Landscape Plan in consultation with the abutting property owners to the south. UI will install two staggered rows of 12 to 14-foot "green giant" arborvitae or spruce trees on four of the abutting properties. A temporary irrigation system will be used to ensure the plantings take root. At the request of the landowner at 172 Schiller Road, UI will remove three large white pines and eight small spruce trees prior to the installation of the new plantings. Prior to any landscape work, UI will meet with each landowner to finalize landscape details. For additional site screening, UI will install green privacy slats on the substation fence.

All of the Development and Management Plan requirements set forth in the Council's Decision & Order for Petition 1120 are in compliance; therefore, Council staff recommends approval with the following conditions;

- 1) the petitioner adhere to the Department of Energy & Environmental Protection's letter dated November 14, 2014 regarding box turtle protection procedures, and that the weekly inspections are carried out by a state licensed/certified herpetologist
- 2) that approval of requested significant changes to the approved D&M Plan be delegated to Council staff in accordance with Regulations of Connecticut State Agencies §16-50j-62(b). In accordance with that section, if advance written notice is impractical, the Petitioner shall provide verbal notice of the changes and shall submit written specifications to the Council within 48 hours after the verbal notice.

November 14, 2014

Mr. Kyle Eckert  
Conestoga-Rovers & Associates  
45 Farmington Vally Drive  
Plainville, CT 06062  
[keckert@croworld.com](mailto:keckert@croworld.com)

Project: Stormwater Discharge Permit for the Hawthorne Substation Located at 180 Hawthorne Drive in Fairfield, Connecticut  
NDDDB Determination No.: 201410928

Dear Kyle,

I have reviewed Natural Diversity Data Base maps and files regarding the area delineated on the map provided for the stormwater discharge permit for the Hawthorne Substation located at 180 Hawthorne Drive in Fairfield, Connecticut. According to our information there are extant populations of State Special Concern *Terrapene carolina carolina* (eastern box turtle) in the area where this work will occur. If possible, conduct project activities between October 1 and April 1 in order to avoid impacting active turtles. If any work will occur when these turtles are active (April 1st to September 30<sup>th</sup>) I would recommend the following protection strategies be implemented in order to protect these turtles:

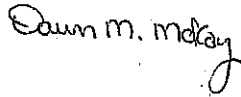
- Silt fencing should be installed around the work area prior to construction;
- After silt fencing is installed and prior to construction, a sweep of the work area should be conducted to look for turtles;
- Workers should be apprised of the possible presence of turtles, and provided a description of the species  
([http://www.ct.gov/dep/cwp/view.asp?a=2723&q=473472&depNav\\_GID=1655](http://www.ct.gov/dep/cwp/view.asp?a=2723&q=473472&depNav_GID=1655));
- Any turtles that are discovered should be moved, unharmed, to an area immediately outside of the fenced area, and position in the same direction that it was walking;
- No vehicles or heavy machinery should be parked in any turtle habitat;
- Work conducted during early morning and evening hours should occur with special care not to harm basking or foraging individuals; and
- All silt fencing should be removed after work is completed and soils are stable so that reptile and amphibian movement between uplands and wetlands is not restricted.

Thank you for implementing these protection measures for box turtle. I have attached a "Box Turtle" fact sheet for your files. This determination is good for one year. Please re-submit an NDDDB Request for Review if the scope of work changes or if work has not begun on this project by November 14, 2015.

Natural Diversity Data Base information includes all information regarding critical biological resources available to us at the time of the request. This information is a compilation of data collected over the years by the Department of Energy and Environmental Protection's Natural History Survey and cooperating units of DEEP, private conservation groups and the scientific community. This information is not necessarily the result of comprehensive or site-specific field investigations. Consultations with the Data Base should not be substitutes for on-site surveys required for environmental assessments. Current research projects and new contributors continue to identify additional populations of species and locations of habitats of concern, as well as, enhance existing data. Such new information is incorporated into the Data Base as it becomes available. The result of this review does not preclude the possibility that listed species may be encountered on site and that additional action may be necessary to remain in compliance with certain state permits.

Please contact me if you have further questions at (860) 424-3592, or [dawn.mckay@ct.gov](mailto:dawn.mckay@ct.gov).  
Thank you for consulting the Natural Diversity Data Base.

Sincerely,



Dawn M. McKay  
Environmental Analyst 3