



A UIL HOLDINGS COMPANY

The United Illuminating Company
100 Marsh Hill Road, Orange, CT 06477-3629
203-499-2000

VIA ELECTRONIC MAIL AND FedEx

December 17, 2015

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

Re: **PETITION NO. 1199** – The United Illuminating Company, Petition for a Declaratory Ruling that no Certificate of Environmental Compatibility and Public Need is Required for the Construction, Operation and Maintenance of a 2.8 Megawatt AC Fuel Cell to be Located at Amity Regional High School, 25 Newton Road, Woodbridge, Connecticut – **Supplemental Submission**

Dear Chairman Stein:

Please find enclosed the original and fifteen (15) copies of The United Illuminating Company's ("UI" or the "Company") response to a question posed by Connecticut Siting Council ("Council") staff members during the site review in the above captioned Petition. UI will also electronically file this Supplemental Submission via siting.council@ct.gov.

Additionally, UI will attempt to respond to another issue raised during the site review. In Petition 1199, UI asks for approval to build a 2.8 megawatt ("MW") fuel cell. This Council has already approved the Company's requests to construct a 2.8 MW fuel cell project in New Haven¹ as well a 2.8 MW fuel cell and 2.2 MW solar photovoltaic facility project in Bridgeport.² If the Council approves Petition 1199, the cumulative nameplate rating of UI's facilities approved by the Council will total 10.6 MW.

As you know, Connecticut General Statutes § 16-244v permits UI, as an electric distribution company, to own up to 10 MW of Class I renewable generation. The Public Utilities Regulatory Authority ("PURA") approved UI's construction of a renewable generation project in Woodbridge to satisfy UI's remaining capacity, pursuant to § 16-244v, in Docket No. 12-01-05RE01 by letter dated February 3, 2015. I have enclosed this letter for your review.

For this project, UI solicited bids for a 2.2 MW fuel cell installation. FuelCell Energy responded with a 2.8 MW model, derated to 2.2 MW, and was the lowest cost respondent. To comply with

¹ See Connecticut Siting Council Petition 1113, Decision Dated September 4, 2014.

² See Connecticut Siting Council Petition 1104, Decision Dated October 13, 2014.

PURA's approval, UI will manually reduce the capacity at the site to 2.2 MW and bid such amount into the energy markets. However, as UI is installing a fuel cell with the potential to produce up to 2.8 MW, the Company made the decision to petition for siting approval of the full 2.8 MW nameplate rating. This will allow UI to take full advantage of the facility if in the future, the Connecticut Legislature increases UI's allowable ownership above 10 MW, or if another UI facility goes offline for an extended period of time.

Without such approvals, UI will not operate more than 10 MW of renewable generation.

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

Very truly yours,



James R. Morrissey
Attorney
UIL Holdings Corp.
As Agent for The United Illuminating Company

The United Illuminating Company
Petition 1199
Supplemental Submission – Question Re: Desulfurization
December 17, 2015

Q. How Does The United Illuminating Company's ("UI") contractors handle, transport, and dispose of spent desulfurized material?

A. Fuel cells utilize natural gas in the generation of electricity. Natural gas contains sulfur, and sulfur can harm the stacks that comprise a fuel cell. Accordingly, the fuel cell plant UI seeks approval for incorporates a desulfurization process that consists of two flow-through vessels configured in a series and filled with specialized desulfurization adsorption media. In the case of a fuel cell, "adsorption media" refers to a granular material that filters sulfur from the natural gas as it passes through system. The media's capacity to remove sulfur from the natural gas diminishes over time. When the continued operation of the fuel cell mandates replacement of the adsorption material, the fuel gas process flow is switched to a lag vessel so that the spent media can then be safely removed and replaced. After media replacement, the vessel containing the fresh media becomes the second (polishing) desulfurizer vessel in the process flow series.

The spent solid waste media removed from the process has been characterized at similar locations to be a Resource Conservation and Recovery Act ("RCRA") hazardous material based on the presence of benzene (D018). Benzene, another compound found within natural gas, is co-adsorbed into the media along with the target sulfur compounds.

The waste generation quantity during any single desulfurizer media replacement event is less than 2,000 pounds (900 kg) and previous operating experience throughout Connecticut suggests that desulfurizer maintenance events will occur less than annually, and more likely less frequently than every two years. The monthly waste generation rate is within the range for generators that operate under Small Quantity Generators rules. FuelCell Energy, as the plant operations and maintenance contractor to the plant owner (generator), will comply with all rules for hazardous waste generators as promulgated through the Regulations of Connecticut State Agencies § 22a-449(c).

The waste generated by removing spent desulfurizer media from the process is managed by immediately containerizing and transporting the waste off-site to a licensed disposal facility. No party responsible for the site will treat, store or dispose this (or any other) hazardous waste at the site. The containerized waste is shipped off-site under a Uniform Hazardous Waste Manifest using the Environmental Protection Agency's RCRA identification (Generator) number provided by the plant owner. UI will contract with a licensed hazardous waste transporter to pick up the waste and transport it to the approved designated disposal facility. The waste contractor will determine what licensed waste destination facility it will utilize and will identify that facility during the contracting stage.

Since the waste is a granular solid, there is a low risk of any material spill or release. Should however, any material be spilled during handling, the environmental contractor hauling the waste will also be fully capable to clean and remove any and all spilled materials.



STATE OF CONNECTICUT
PUBLIC UTILITIES REGULATORY AUTHORITY

February 3, 2015

Bruce L. McDermott
Managing Counsel-Operations
UIL Holdings Corporation
157 Church Street
New Haven, CT 06506-0901

Re: Docket No. 12-01-05RE01 – The United Illuminating Company's Request for Approval of Its Renewable Connections Program – Reconsideration – Compliance Order No. 2

Dear Mr. McDermott:

The Public Utilities Regulatory Authority (PURA or Authority) is in receipt of The United Illuminating Company's (UI or Company) letter dated January 8, 2015 in response to Compliance Order No. 2 in the above captioned docket. The Authority has reviewed the Company's order compliance filing strictly with regards to the Company's proposed budget for the remaining 2.2 MW Renewable Connections Program (RCP) as a fuel cell project to be located in the town of Woodbridge (Woodbridge or Town).

The Company indicated that as a result of the RFP process and development work, the proposed budget for the RCP in Woodbridge is \$12.4 million. UI did not include rental payments in the Woodbridge project's budget. UI will provide the Authority with an update of the property costs, if any, once the final action by the Town has been taken. The Authority reviewed the remainder of the Company's project details and revenue requirements filed within Compliance Order No. 2, Confidential Attachments 1 and 2, and finds the filing meets the requirements of that Order.

With regards to the project location, UI indicates that exact location is currently undetermined but will be in Woodbridge's Town Center. UI indicated it is working with the Town to select the exact location and possible use of the fuel cell as a generation component of a micro-grid project in conjunction with the Town's selection by the Department of Energy and Environmental Protection to be the location of a micro-grid project. PURA's statutory authority does not include jurisdiction over the selection of the location.

Sincerely,

PUBLIC UTILITIES REGULATORY AUTHORITY

Nicholas E. Neeley
Acting Executive Secretary

cc: Service list

10 Franklin Square, New Britain, CT 06051

An Equal Opportunity Employer
www.ct.gov/pura