



September 4, 2014

Robert Stein, Chairman
Connecticut Siting Council
10 Franklin Square
New Britain, Connecticut 06051

RE: 2.2 MW Solar Photo-voltaic Facility and 2.8 MW Fuel Cell Facility
United Illuminating Company
Bridgeport, Connecticut
Petition No. 1104

Dear Chairman Stein:

Staff of this department has reviewed the above-referenced petition for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need will be required for the proposed 2.2 MW photo-voltaic generating facility and 2.8 MW fuel cell facility proposed to be constructed at the Seaside Park Landfill in Bridgeport. A field review of the site was conducted on July 22, 2014. Based on these efforts, the following comments are offered to the Council for your use in this proceeding.

Facility and Site Description

United Illuminating proposes to construct the solar generating facility consisting of approximately 8,550 photo-voltaic panels atop the landfill's central ridge, while the fuel cell would be installed on the eastern end of the City of Bridgeport's property on an area which is not part of the Seaside Park Landfill waste disposal landform. This latter area of the property is used by the City for a variety of waste purposes including a stump dump, asphalt pavement millings, street sweepings and a gravel pile. To the west of the landfill is a smaller area containing recycling dumpsters and Bridgeport Parks Department trash barrels.

Vegetative cover atop the landfill consists largely of mugwort (*Artemisia vulgaris*), generally about 3' tall, but reaching a height of 6' at the highest elevations on the landfill. *Phragmites* is common in several areas, chiefly in stands on the northern and southern flanks of the landfill, but also in a stand at the top. A small grove of mulberry trees is found at the top of the landfill. Scattered cottonwood, black locust and tree-of-heaven are also found on the landfill. Some catalpa are also found from the metal hydroxide sludge disposal area eastward.

Energy Supply Considerations

DEEP supports the addition of the five megawatts of renewable power proposed by this project as well as the beneficial reuse of a closed landfill. The photo-voltaic generated electricity adds capacity to Connecticut's energy supply without any carbon emissions, while the carbon

emissions of the fuel cell are far less than would be emitted by a fossil fuel generating plant. In addition, this power will be produced within the supply-constrained Southwest Connecticut electric load region for which transmission options to import power are sub-optimal.

Landfill Issues

Because the solar portion of the proposed project is located on top of the Seaside Park Landfill, a disruption approval for alterations to the landfill cap will be necessary. When the applicant has developed plans to the point that grading needs and other impacts to the landfill cap have been determined, the applicant should contact David McKeegan of the DEEP Solid Waste Division at (860) 424-3313 or at david.mckeegan@ct.gov. A Stewardship Permit pursuant to Connecticut General Statutes section 22a-208a was issued by DEEP to the City of Bridgeport on September 28, 2010 to cover the City's on-going maintenance, monitoring and closure obligations at the landfill. The permit is in effect for a period of ten years. It is undetermined at this point whether the Stewardship Permit will need to be amended. DEEP has not had any contact with United Illuminating or the City of Bridgeport regarding this project since an initial consultation meeting on December 2, 2013. In particular, the City's plans for final closure of the metal hydroxide sludge disposal area of the landfill have not been finalized or submitted for review. Any impact to this area from the proposed project would be problematic. A preliminary layout plan for the solar panels indicated that the hydroxide sludge area would be avoided. David McKeegan or Amanda Killeen at (860) 424-3351 should be contacted for further regulatory guidance when the project design's impact or lack of impact on the hydroxide sludge area have been determined.

Natural Diversity Data Base

DEEP is in very recent receipt of a Habitat Assessment Report prepared by Fitzgerald and Halliday for the project to assess the potential impacts on four NBBD-listed species for which historical records indicate occurrences at the Seaside Park Landfill. These species are:

- Horned lark (*Eremophila alpestris*) - a State endangered species
- Sickle-leaved golden aster (*Pityopsis falcata*) - a State endangered species
- Beach needlegrass (*Aristida tuberculosa*) - a State endangered species
- Sand dropseed (*Sporobolus cryptandrus*) - a State threatened species

The applicant has submitted documentation that no suitable habitat for any of these species occurs at the landfill. DEEP concurs with these assessments. For sand dropseed, field work was performed at the end of August and the findings for this species were just submitted today. During this field work for this latter species, an American kestrel (*Falco sparverius*), a State threatened species, was sighted at the landfill and, though there is no evidence of any nesting activity occurring at the site, the activities of this bird will be monitored by the applicant. Should nesting activity be observed at the site, a 500-foot protection zone from any construction activities will be established around the nest. DEEP concurs with this proposed mitigation measure.

Miscellaneous Comments

The proposed facility is approximately 3½ miles from Sikorsky Memorial Airport in Stratford. Would there be any risk of glare from the solar panels blinding pilots of low flying planes approaching the airport?

Appendix A of Exhibit II contains a list of permits necessary to construct either a solar or wind turbine energy facility at the site. Included on that list is the need for an Air Permit to Construct and Operate a Stationary Source. The requirement for such a permit would not be triggered by either the photo-voltaic facility or a wind turbine facility as neither of these would generate any emissions of any criteria air pollutants.

Thank you for the opportunity to review this petition and to submit these comments to the Council. Should you, other Council members or Council staff have any questions, please feel free to call me at (860) 424-4110.

Respectfully yours,



Frederick L. Riese
Senior Environmental Analyst

cc: David McKeegan, DEEP Solid Waste
Amanda Killeen, DEEP Remediation
Dawn McKay, DEEP NDDB