



November 4, 2015

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

RE: 63.3 MW Fuel Cell Facility
Beacon Falls Energy Park, LLC
Beacon Falls, Connecticut
Petition No. 1184

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 63.3 MW fuel cell electric generating facility in a former O&G Industries sand and gravel pit west of Railroad Avenue in Beacon Falls. The facility will consist of 21 fuel cells of either 3.7 MW or 2.8 MW capacity, switchyard facilities and a metering station. A field review of the site was conducted on October 31, 2015. Based on these efforts, the following comments are offered to the Council for your use in this proceeding.

Site Description

The proposed project site is an appropriate one for the intended use. The former sand and gravel pit supports active dirt bike and all-terrain vehicle use as evidenced by a robust network of trails across most of the property. The least disturbed portion of the property is the southern end where a small pond supports significant waterfowl use and a forested area dominated by red oak with lesser amounts of red maple, white oak, pin cherry and white pine lies to the east of the pond. East of this forest stand, an access road of very recent vintage lies just west of the Metro-North Waterbury Branch train tracks. This road moves more interior into the site as it goes north and then widens out into a general, recently mowed central clearing. Grey birch, cottonwood, white pine and red cedar occur across the central portion of the site, mostly as isolated trees with the exception of the grey birch which occurs as a stand. Goldenrod is the chief herbaceous species on the site.

Highway noise from Route 8 is the dominant component of the ambient noise. For a property that is not actively used or maintained, the site is surprisingly devoid of trash or debris. Other than a discarded tire south of the pond, one in the pond, and the occasional beer can or water bottle, the site is very clean. A lack of easy vehicular access to the property is likely the chief reason for this.

The description in the Petition of the site as a bowl is an accurate one, at least relative to

the surrounding roads to the north, northwest and southwest, namely Lopus Road, Gruber Road and Route 8, respectively. This will minimize both visual and acoustic impacts from this facility.

Gruber Road is the nearest residential road to the site. There are nine homes along the west side of this dead end road, just west of the northern portion of the O&G site. As mentioned, this street sits well above the elevation at which the fuel cells would be placed. Immediately east of Gruber Road is a narrow band of trees including a line of white pine at 10 – 12' centers which were part of a previous landscaping/buffering effort. A dirt road runs from the south end of Gruber Road northward along this line of white pines and then continuing on eastward as an increasingly overgrown path along the north edge of the O&G property just south of Lopus Road. Like Gruber Road, Lopus Road sits well above the floor of the sand and gravel pit. The proposed access road alignment off Lopus Road will be a very steep one but there are no better options given the presence of the railroad tracks across all possible at-grade access routes.

The railroad tracks of the Waterbury Branch of Metro-North form the eastern boundary of the site. The tracks consist of the main line and one or two sidings (one east of the south portion of the site, two east of the northern portion of the site). A gondola car full of crushed stone, presumably ballast for the rail line, sits on one of these sidings near the northern end of the O&G site, and appears to have been there for a substantial amount of time.

Air Permits

Section 5.1 of the Petition describes the projected air emissions of the facility and concludes that no regulatory thresholds are triggered by its emissions. In fact, Title V and New Source Review requirements are triggered by this facility due to its carbon dioxide (CO₂) emissions exceeding 100,000 tons per year. The applicant has been notified of this requirement and is in the process of preparing the application, the submission of which is expected soon. As there are no available controls for CO₂ emissions, the permit application substantially consists of an alternatives analysis to look at options which could have lower CO₂ emissions such as the use of hydrogen fuel or different types of equipment or procedures and documenting why these alternatives would not be economically or operationally feasible.

Water Permits

In addition to the General Permit for the Discharge of Water Treatment Wastewaters discussed in Section 5.2.5 of the Petition, the project will also require registration under the General Permit for Stormwater and Dewatering Wastewaters from Construction Activities (DEEP-WPED-GP015) to cover the three year construction interval for the Beacon Falls Energy Park. Registration under the General Permit for Stormwaters Associated with Industrial Activities will not be necessary for this project because the definition of industrial activities for this permit does not include powerplants unless they involve steam generation of electricity. This plant does not meet that definition.

Natural Diversity Database Listed Species

As detailed in Exhibit L, five State Species of Special Concern have been identified as potentially occurring on the site. The applicant has reported finding one of these, the brown thrasher (*Toxostoma rufum*) on the site. No correspondence subsequent to the letter of June 22, 2015 in Exhibit L has been received by the department or sent to the applicant. The June 22, 2015 letter is only a preliminary assessment by DEEP and cannot be used with any DEEP permit

application. If a final determination is desired, the applicant must re-submit an NDDB request and detail how each of these species would be protected if they are found on the site or if habitat for them exists on the site.

DEEP has no record of any actual surveys that may have been done on the project site. If surveys are or have been performed, DEEP would need to see the reports including the survey protocol used, the dates of the surveys, the qualifications of the personnel performing the survey and the protection strategy for each species that is either found on the site or for which suitable habitat exists on site. Once we are in receipt of the survey reports, we can issue a concurrence or rejection of the findings of the survey. If no suitable habitat exists on site, that should also be documented.

The six-step protocol for protecting any hognose snake (*Heterodon platirhinos*) on the site from injury or mortality, as detailed in Section 5.7.4, appears reasonable but should include language that any hognose snake found must be moved or allowed to move to a safe area off the project site. As a protected species, it cannot be killed. Though not poisonous or dangerous, the snake should be handled only by a trained biologist.

Night Lighting

Section 4.0 of the Petition discusses the use of dark sky type lighting fixtures to minimize light impacts at night. Due to the presence of proximal residential areas to the east on Railroad Avenue and to the west on Gruber Road, the lighting fixtures should not only direct the lighting downward but also, to the extent feasible, inward toward the interior of the site to minimize impacts to homes on these streets.

Miscellaneous Comments

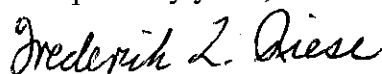
The Petition mentions that the power from the fuel cell facility will be tied into the grid at the Beacon Falls Substation located at the intersection of Cold Spring Road and Lopus Road Extension. There are two feasible routes to effect this connection, either west on Lopus Road and north on Lopus Road Extension, or east on Lopus Road and north on Cold Spring Road. I did not find any indication in the Petition of which route is envisioned.

Is the underground fiber option network mentioned in Section 5.10.6 and described as owned by AT&T now owned by Frontier, or was that infrastructure retained by AT&T?

The first paragraph of the discussion of stormwater in Exhibit G adds a 22nd fuel cell to the facility that is elsewhere described as containing 21 cells.

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