

January 11, 2013

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

> RE: 5.0 MW Photo-voltaic Generating Facility Somers Solar Center LLC Somers, Connecticut

Petition No. 1042

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 5.0 MW photo-voltaic generating facility proposed for a site at 458 and 488 South Road in Somers. A field review of the site was conducted on January 2, 2013. Based on these efforts, the following comments are offered to the Council for your use in this proceeding.

Somers Solar Center LLC proposes to construct a photo-voltaic generating facility employing 31,000 PV panels, more or less, on a 95-acre site (listed as 106 acres in the appendices) of agricultural land on the west side of Route 83, South Street, in Somers, near the Ellington town line. The site is bisected by a watercourse and its riparian wetlands flowing generally northeast to southwest across the site. The watercourse, labeled as Abbey Creek in the petition and as a tributary to Abbey Brook in the appendices (USGS topographic maps indicate the latter is correct), and its wetlands appear to be avoided by the indicated layout of the solar arrays shown in the petition. Neither the array boundaries nor the wetland limits were marked in the field.

The Somers Solar Center is one of two solar generating facilities of 5.0 MW each producing zero emissions Class I renewable energy which were selected by DEEP pursuant to section 127 of Public Act 11-80. These two projects were selected from twenty-one proposals which were submitted for consideration under this solicitation.

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Site Description

Six inches of snow covered the site during the January 2 DEEP field review, somewhat limiting the information that could be gathered during this visit. As noted in the application, there are no structures on the host site, assuming the Lipton homestead and farm outbuildings at 458 South Street are not part of the project property. Homes are visible in several directions from the project site but are not immediately proximal. The topography of the site, as would be expected of a cornfield, is mostly gentle. There are steeper areas to the rear (western end) of the site due to previous soil and gravel excavation in the northwest corner of the property, and also adjacent to a north-south ridge which separates the two array areas proposed north of the access road. There is also a small but moderately steep knoll in the south central portion of the northeastern of the four array areas. Access to the property would be via a dirt farm road, the initial portion of which is paved, extending west from Route 83.

Though the petition did not state the height of the solar panel arrays, they would be sufficiently low to the ground so as not to block any views or create an aesthetic intrusion. Views of the solar center will be mostly from the east and the southwest, the exception being the smaller solar array to the northwest corner of the host parcel. This cluster would be seen by viewers to the west, which would be confined to personnel at the Somers Highway Department garage. The home at 502 South Street, east of the southeastern array, is the closest home to the facility and is only partially screened from it. The views from the southwest should be virtually fully screened when trees are in leaf. The petition did not discuss whether reflective glare from the solar panels could affect off-site receptors, particularly when the sun is at low angles. Available mitigative techniques if this should be a problem were also not discussed.

In addition to the riparian wetlands along the tributary to Abbey Brook, there appeared to be possible small pockets of manmade wetlands under the snow in areas in the northwestern corner of the property which was previously excavated for gravel. This possibility is based on the presence of water below the snow in the lowest areas on a day when the temperature was below freezing and the presence of such water was not due to meltwater. This corner of the property also hosts several small clusters of debris including concrete slabs, root masses, pallet wood and a desk.

Another debris pile is located east of the northeastern array location just west of a crossing of the Abbey Brook tributary. Fencing, brush, utility pole sections, a mattress and a dog house are the main elements comprising this collection of debris. Though the debris collections on the property are more of a brush dump nature than municipal solid waste or hazardous waste, they should be cleaning up and removed from the site.

A north-south ridge separates the two northerly panel arrays. Three planted rows of scotch pine with some volunteer hemlock, red cedar and staghorn sumac populate this ridge. These trees are indicated for removal according to a site plan in Appendix G.

Natural Diversity Data Base

The petition does show an NDDB 'blob' west of the host property which very tangentially intersects it. This blob is in connection with the occurrence of climbing fern (*Lygodium plamatum*), a Species of Special Concern which favors wooded wetland and open swamp habitat. The occurrence of this species is actually west of Egypt Road and will not be

impacted by the proposed facility.

Farmland Status

Due to the current status of the host site as supporting agricultural uses, the Council should solicit the input of the Connecticut Department of Agriculture concerning the proposed use of close to 100 acres of active farmland for the subject proposal. As of the date of the submission of these DEEP comments, there is no indication on the Council's webpage for Petition 1042 that the Department of Agriculture has submitted any comments on this petition. We do note that Commissioner Reviczky (mis-spelled as Revicky in the Nov. 30 2012 notice list) was given notice of this petition.

General Comments

The petition (page 19) notes the need to register this facility under DEEP's General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities. The proposed facility does not meet the definition of an industrial activity under the General Permit for Discharge of Storm Water Associated with Industrial Activity and therefore will not require registration for its stormwater during its operational phase under this latter permit.

The petition does not discuss the procedure for cleaning the solar panels. We assume that periodic cleaning of the 31,000 solar panels will be necessary. What procedure and what materials will be involved in this cleaning? Similarly, weed and vegetation control around the arrays and perhaps beneath the panel mountings will be required periodically. Will this be done by purely mechanical means or will herbicides be used to control vegetation?

Lastly, we assume the panels are not mounted directly on the ground but on some type of mounting supports. To what extent can precipitation drain between panels and infiltrate underlying soil? Does all precipitation falling on an array drain off the array only at its perimeter? Relatedly, are there are procedures for snow removal for the arrays or is melting sufficient to avoid the need for separate snow removal activity?

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,

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Senior Environmental Analyst

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cc: Commissioner Dan Esty