

STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

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VIA ELECTRONIC MAIL

July 29, 2021

TO:

Service List dated July 13, 2021

FROM:

Melanie Bachman, Executive Director

RE:

DOCKET NO. 505 – Haddam Quarter Solar, LLC application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation of a 2.8-megawatt-AC solar photovoltaic electric generating facility located south of Haddam Quarter Road and north of Johnson Lane, Durham,

Connecticut and associated electrical interconnection.

Comments have been received from the Connecticut Council on Environmental Quality on July 28, 2021. A copy of the comments is attached for your review.

MB/RDM/lm

c:

Council Members

STATE OF CONNECTICUT



Keith Ainsworth Acting Chair

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David Kalafa

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Peter Hearn
Executive Director

COUNCIL ON ENVIRONMENTAL QUALITY

July 28, 2021

Melanie Bachman, Executive Director Connecticut Siting Council Ten Franklin Square New Britain, CT 06051

DOCKET NO. 505 –Haddam Quarter Solar, LLC (Applicant) application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation of a 2.8-megawatt-AC solar photovoltaic electric generating facility located south of Haddam Quarter Road and north of Johnson Lane, Durham, Connecticut and associated electrical interconnection.

Dear Ms. Bachman:

The Council on Environmental Quality ("the Council") supports the development of clean, renewable energy technologies on appropriate sites in Connecticut. The Council offers the following comments with regard to Docket 505.

1. Wetlands

The Applicant has designed the proposed facility to minimize the potential impacts the proposed project would have on the identified wetlands. However, there are instances where the proposed project would encroach upon a 100-foot wetland buffer. As detailed in a recent report, "larger buffers will be more effective over the long run because buffers can become saturated with sediments and nutrients, gradually reducing their effectiveness, and because it is much harder to maintain the long term integrity of small buffers." In addition, "wetland buffers maintain or serve directly as habitat for aquatic and wetland-dependent species that rely on complementary upland habitat for critical stages of their life-history." While not governing in this case, the Town of Durham's Inland Wetland and Watercourses Regulations, states that construction activities within the "upland review area", which is within 100 feet of a wetland, are a regulated activity. Consequently, the Council recommends that the Petitioner utilize a minimum 100-foot buffer around all identified wetlands and assess the total area of direct and indirect impacts that would result from encroaching on the standard 100-foot buffer on the proposed site.

2. Wildlife

The Applicant states that the most recent Natural Diversity Data Base (NDDB) mapping was reviewed and that no NDDB polygon exists on or within one-quarter mile of the Site. While consultation with NDDB is not required since there are no records of statelisted species, it is possible that state-listed species may be present on the proposed site given its proximity to Hersig Brook, a perennial stream, and its associated wetlands and riparian corridor. Furthermore, the United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPAC) tool has identified seven migratory

¹ Environmental Protection Agency, Planner's Guide to Wetland Buffers for Local Governments, Environmental Law Institute, March 2008; https://www.epa.gov/sites/production/files/2014-03/documents/final_40.pdf

birds that may be present on the proposed site. Consequently, the Council recommends that the Applicant survey the proposed site to assess the presence of any endangered, threatened and special concern species or suitable habitat that might be present. If found, the Council recommends that the Applicant consult with the NDDB to develop and implement plans to eliminate or mitigate any potential adverse impacts to state-listed species and /or any of the seven migratory bird species identified by the USFWS. In addition, the Council recommends providing space at the bottom of the proposed perimeter fence to allow for the migration of small wildlife, if consistent with safety requirements.

3. Prime Farmland Soils

The Petitioner states that approximately 7.7 acres within the proposed site is underlain by prime farmland soils. The Council is concerned about the impacts the proposed project would have on the prime farmland soils on the proposed site. The Council recommends that best practices be employed during construction that might allow for the future restoration of those soils to productive agricultural use. These practices include minimizing grading, trenching, and compaction of prime farmland soils.

Thank you for your consideration of these comments.

Sincerely,

Peter Hearn

Executive Director

3. Vegetation

The Petitioner states in Exhibit M - Integrated Vegetation Management Plan (IVMP) that the proposed site(s) will use a combination of "biological control methods (Adaptive Multi-Paddock sheep grazing), mechanical, and chemical control measures as needed". The Council recommends that the Petitioner provide a detailed grazing plan for the management of vegetation on the proposed site(s). The Council is also concerned about the use of certain chemicals for vegetative management since the proposed site(s) are underlain by a municipal "Aquifer Protection Zone". According to the United States Geological Survey, which monitors water quality throughout the United States, "fertilizers and pesticides don't remain stationary on the landscape where they are applied; runoff and infiltration transport these contaminants into local streams, rivers, and groundwater." Consequently, the Council recommends the use of organic herbicides, in accordance with integrated pest management (IPM) standards, to control vegetation while reducing runoff that might contaminate both surface water and groundwater and potentially impact non-targeted species.

4. Visibility

The Petitioner states that they performed a quantitative analysis of the proposed solar project; however, neither the Petition narrative nor Exhibit Y- Quantitative and Qualitative Visual Impacts indicates how many acres (quantity) within a predefined distance would be visually impacted by the proposed facility. In addition, Exhibit Y only includes two locations, which are proximate to one another, where a projected view (photo simulation) of the proposed facility was done. The Council recommends that the Petitioner enhance the qualitative analysis by providing the number of acres within one mile of the proposed facility that would have visibility of the proposed project, if the existing vegetation is removed as proposed. Further, the Council recommends that the Petitioner expand the number of locations of the qualitative analysis to possibly include more than two locations, such as nearby residences and any state or local highways in the area, provide a map depicting the locations of the qualitative analysis with photographic simulations of what the proposed facility would look like, and indicate whether the proposed project would be visible during leaf-on and leaf-off conditions. The Council also recommends that evergreen, deer-resistant vegetation be installed along the proposed fence line, as screening, in areas where the proposed facility is proximate to, and would be visible from, existing residences.

5. Core Forest

The Petitioner states that a contiguous forest block, which has an area of 13.5 acres, is not considered a core forest because it is less than 250 acres. While the Petitioner is correct that core forest is generally defined as "a contiguous block of forested land at least three-hundred feet (300') from any forest edge", the requirement that it be 250 acres or greater is incorrect. The 250-acre threshold is actually the upper limit of the definition of small core forest block, but a small core forest block area can be much smaller than 250 acres. Therefore, the proposed project would result in the destruction of over 13 acres of core forest. The Council does not support the destruction of core forest and recommends that the Petitioner revise the proposed project or evaluate other options for the development of a renewable energy facility on land that would have limited impacts on this important environmental resource.

6. Stormwater

The Petitioner states in the Stormwater Control Plan that during construction, areas exceeding eight vertical feet would be "stabilized with synthetic or vegetated mats in addition to seeding". However, the Petitioner fails to identify the distance for the vertical drop and therefore the slope is unknown. There are also references to "dewatering wastewater" and "washdown areas" that could impact surface water

² United States Geological Survey, Water Resources – Agricultural Contaminants; https://www.usgs.gov/mission-areas/water- resources/science/agricultural-contaminants?qt-science_center_objects=0#qt-science_center_objects

³ Forest Fragmentation Categories Defined, Center for Land Use Education and Research (CLEAR), University of Connecticut; https://clear.uconn.edu/%5C/projects/landscape/v2/forestfrag/measuring/categories.htm#core

quality. The Council recommends that the Petitioner not discharge any dewatering wastewater or create "washdown" wastewater within 100 feet of any wetland or watercourse and that the Petitioner provide more detail regarding the proposed site(s) characteristics and procedures for the proper placement of all erosion control features. The Petitioner states that a General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities (General Permit) and Stormwater Pollution Control Plan was filed with DEEP on October 20, 2020, and is working to secure its General Permit by Spring 2021. The Council notes that the revised General Permit, which became effective on December 31, 2020, mandates the "best practices" for construction of solar energy facilities (Appendix I). Consequently, the Council recommends that the Petitioner adhere to all the provisions of the new General Permit, even if they were not included in its October filing.

Thank you for your consideration of these comments. Please do not hesitate to contact the Council if you have any questions.

Sincerely,

Peter Hearn,

Executive Director