

November 1, 2021

Mr. John Teheder
Director of Planning
Town of Yorktown
Albert A. Capellini Community and Cultural Center
1974 Commerce Street
Yorktown Heights, New York 10598

Re: Yorktown A Solar Project
3849 Foothill Street
Yorktown, New York
Subj: Environmental Review for Foothill Street Solar Farm
File: 2478.001.001

Dear Mr. Teheder and Members of the Planning Board:

Barton & Loguidice, D.P.C. (B&L), has completed our initial Environmental Review for the above referenced community solar project. To date B&L has received the following documents for review and comment:

- The Full Environmental Assessment Form, signed October 20, 2020
- The Operational Noise Levels from the Yorktown A Solar Project, dated June 25, 2021
- The Yorktown A Solar Farm Site Plans, with the latest revision date as January 28, 2021
- The Storm water Pollution Prevention Plan, with the latest revision date as January 28, 2021
- The tree Inventory Reports, dated June 28, 2021
- The Westchester Country Planning Board Referral Review, dated November 13, 2020
- The Additional Comments to the Westchester Country Planning Board Referral Review, dated December 2, 2020
- Existing and Proposed Peak Discharge for the Storm Events, undated
- Decommissioning Plan and Cost Estimate Memo, dated April 23, 2021
- Wetland and Aquatic Resources Delineation Report, dated May 16, 2018
- Initial TCAC Comment on Proposed Solar Facility at 3849 Foothill Street, dated March 22, 2021
- Resolution by Putnam Valley Central School District in Opposition to Project, dated April 8, 2021
- Photo Simulations Day 1 to Year 5, undated
- Draft Mitigation Plan for Proposed Solar Project, Foothill Street, Yorktown, New York, Dated November 30, 2020
- Comparison to Previously Proposed Residential Subdivisions, dated March 12, 2021
- Board of Education Resolution Related to Proposed Yorktown Solar Farm, dated March 2, 2021



Project Description

Con Edison Clean Energy Business, Inc. (Applicant) is proposing the construction of a solar facility and associated electrical appurtenances on a single parcel located at 3849 Foothill Street in the Town of Yorktown. The solar photovoltaic (PV) system is proposed for installation within approximately 16 acres of the 34.23 acres of the site, with the rest remaining undeveloped.

The development will result in one 1.87-megawatts AC solar project. The PV systems will have a maximum height of the mounted panels being at 12ft tall.

This project is considered a large-scale ground mounted solar energy system by the Town Code and is allowed within the Residential Zoning District (R1-40) by a Special Use Permit subject to Planning Board review. B&L offers the following comments to the Planning Board for consideration in its review and recommendation to the Town Board.

Part 1 of the Long Form EAF

B&L has reviewed Part 1 of the Long Form EAF prepared by Bergmann on behalf of the Applicant, Con Edison Clean Energy Business, Inc. and we offer the following comments and questions:

Environmental Specific Comments:

1. Item B (Government Approvals, Funding or Sponsorship) – Should the Town’s conservation board be listed as an agency where approval is required due to presence of wetlands on the site?
2. Item D.1.h (Proposed and Potential Development) – Item h.v. Please replace ‘varies’ with approximate range for both height and length of the stormwater detention basin.
3. Item D.2.e (Project Operations) – Please ensure that the solar panels can be considered a pervious surface by complying with the requirements as stated in the New York State Department of Environmental Conservation Memorandum titled ‘Solar Panel Construction Stormwater Permitting/SWPPP Guidance’ dated February 21, 2020. Large amounts of surface runoff are not being captured on site before being discharged into streams and wetlands. The amount of runoff is changing due to replacing forested areas with grassy fields. In order to comply with the above stated requirements, the change in surface cover must be accounted for such that hydrology will not change between pre and post development conditions. If the panels cannot be considered pervious, adjust these numbers and the design accordingly.
4. Item E.1.b (Land Uses on and Surrounding the Project Site) – Item ‘Other’ describes Pervious Gravel. Ensure that this gravel can indeed be considered pervious.
5. Item E.2.c (Natural Resources On or Near Project Site) – The predominant soil types present on the project site (ChB and SuB, making up 79.90% of the site) are prime farmland. Avoid installation of solar rays on the most valuable productive farmland (provided in order of importance of current use: active rotational farmland, permanent hayland, improved pasture, unimproved pasture, other support lands, fallow/inactive farmland), especially when containing prime farmland soils or soils of statewide importance.
6. Item E.2.o (Natural Resources On or Near Project Site) – Item o states that there are no endangered or threatened species on site, but subsequently lists two species. Please clarify whether endangered or threatened species are present on site or not.

7. Item E.3.b (Designated Public Resources on or Near Project Site) – As stated above in item 5 above, the predominant soil types present on the project site are prime farmland, and solar ray installation is to be avoided on the most valuable productive farmland.

General Comments:

8. Item D.1.b (Proposed and Potential Development) – Item b.b ‘Total Acreage to be physically disturbed’ is listed as 16.00± acres. In the Westchester County Planning Board Referral Review letters, page 1, it is listed as 15 acres. The Grading/SWPP Plan sheet (C003) also says 16.00 acres. Please ensure all documents are stating the same number, and that the number is accurate to the hundredth of an acre.
9. Item D.1.e (Proposed and Potential Development) – Item e.ii. ‘Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases’, Applicant answers “The project is divided into phases to avoid disturbing more than 5 acres at a time.” The applicant notes that the total number of phases anticipated is 3 phases. 5 acres times 3 phases is 15 acres total of disturbed area. Applicant states earlier (see item 8 above) that the total number of disturbed acres is 16.00 acres, which would therefore require at least 4 phases. Please clarify how many acres are being disturbed total, how many acres are being disturbed in each phase, and why.
10. Item D.1.g (Proposed and Potential Development) – Item g asks about the number and size of structures. Applicant notes ‘N/A’. The ground mounted solar panels are considered accessory structures and therefore this information should be filled out with number of panels and size/height of mounted panels.
11. Item E.1.b (Land Uses on and Surrounding the Project Site) – Item ‘Roads, Buildings and other paved or impervious surfaces’ Item ‘Forested’ states that 15.90 acres of forested area are to be removed, making the disturbed area now 15.90 acres. This does not match the acreage mentioned elsewhere (see items 8 and 9 above). All disturbance numbers must match on all documents and be accurate to the hundredth of an acre.
12. Item E.2.f (Natural Resources On or Near Project Site) – Note that static mounted solar panels shall not be placed on slopes greater than 25%.

Wetland and Aquatic Resources Delineation Report

B&L has reviewed the Wetland and Aquatic Resources Delineation Report prepared by Bergmann on behalf of the Applicant, Con Edison Clean Energy Business, Inc. and we offer the following comments and questions:

Environmental Specific Comments:

1. Page 6-7, 3.5 Threatened and Endangered Species Review – The Indiana Bat (endangered) and the Northern Long-eared bat (threatened) may occur within the project area. It is recommended that an official evaluation of the site be conducted to ensure that none of these species are present on site and that the final development will have no impact on said species. See also item 6 above under Part 1 of the Long Form EAF and adjust accordingly.
2. Page 8, 4.1 Wetlands and Aquatic Resources and 4.2 Uplands – The wetlands include various trees, as well as the upland area. Ensure that panel locations surrounding wetlands are accurate due to shading associated with untouched vegetation within the 100’ wetland buffer.

3. Figures, Wetland Determination Data From, Sampling Point W 1-1 – Prevalence Index worksheet is not filled out.

General Comments:

4. Page 3, Introduction – Site is listed as being 34.62 acres. In the EAF & WCPB letter, site is stated to be 34.23 acres. Please make sure all areas are matching in all letters.

Resolution by Putnam Valley Central School District in Opposition to Project

B&L has reviewed the Resolution by Putnam Valley Central School District in Opposition to Project prepared by Con Edison Clean Energy Business, Inc. to the chairman of the Planning Board and we offer the following comments and questions:

Environmental Specific Comments:

1. Page 1-2 – The letter discusses the reduction in stormwater runoff noting the use of the detention pond and bioretention area. These areas capture some of the runoff from the property, but leave other areas of the property free to runoff into existing streams and wetlands at an increased rate due to change in land cover. Please ensure that the proposed stormwater management practices will actually provide the required WQv and RRv for the entirety of the site, and if they do not, adjust plans accordingly.
2. Page 2 – The letter discusses the noise levels around the Wellness Trail not being affected by the project. This Wellness Trail is not shown or spoken of in the noise study. Please adjust the noise study to accurately show that the proposed activities will not be affecting the Wellness Trail.
3. Page 2-3 – The letter states that the panels will be 3' off the ground, but earlier in the letter says 12'. Please clarify height of panels throughout site and that wildlife will indeed be able to move throughout the site freely.

General Comments:

4. Page 2 – The letter states that the maximum height of the panels will be 12 feet. This information is not stated anywhere else. Please ensure this number is accurate, and if so, please present on plans.
5. Page 5 – States that the project will produce 1.87 MW AC of energy. The site plans say '1.90 MW'. Please ensure site plans match letter.

Board of Education Resolution Related to Proposed Yorktown Solar Farm

B&L has reviewed the Board of Education Resolution that includes the Evaluation of Proposal for the Solar Farm by Ed Vergano from Preferred Design and Construction, Inc. for the Putnam Valley Central School District. Overall, B&L is in agreeance with almost all of Mr. Vergano's findings and recommendations and the applicant is advised to read through this letter and comply with all of Mr. Veragano's requests. There are a few areas that B&L is not in agreeance with, and those are as follows:

1. This letter notes frequently the existing flooding conditions in the schools parking area. While this is unfortunate, as long as runoff to the existing lot is not being increased, this is not the

responsibility of the applicant. The applicants only responsibility is to match existing conditions, and if they can improve existing conditions that is preferable but not necessary. This is something that the applicant can agree to in order to move the project along faster but it is not necessary.

2. Page 3, Stormwater Runoff (SWPPP) – Mr. Vergano lists other issues for the designer to look at. Item 3 notes that the 50' buffer is an area that is intended to remain untouched. This statement is untrue. Unless some sort of agreement has been made between the school and the applicant, which can be argued for if that would keep the abutting properties happy, the 50' buffer is intended for structures only. As long as no solar panels are within this 50' buffer, the applicant is in compliance with the zoning laws.

Draft Mitigation Plan for Proposed Solar Project, Foothill Street, Yorktown New York

B&L has reviewed the Draft Mitigation Plan and agrees that this plan shows adequate mitigation measures to ensure the environmental health of the site and surrounding areas. B&L is interested in reviewing the final mitigation plan before acceptance. There is one comment:

1. The mitigation plan notes that the site does not require fire services. While it is unlikely, this site does include electrical equipment and it does not appear wise to state that the site will never need this service in absolute language.

Tree Inventory Report & Comparison to Previously Proposed Residential Subdivisions

B&L has reviewed the tree inventory report. B&L also reviewed the Comparison to Previously Proposed Residential Subdivisions letter that included the Greenhouse Gas Equivalencies Calculator. Additionally, B&L evaluated the site for the presence of core forests, as well as evaluated the site with a field walk for existing conditions.

A core forest is essentially a piece of a forest that is surrounded by more forest. Forest fragmentation is a significant problem today in the struggle to maintain biodiversity and shall be avoided at all costs. This property is not part of a core forest and therefore removing the forest in this area is not out of the question. The proposed alternative developments split the forest on property, and therefore promotes forest fragmentation to a greater extent than the solar development that will keep the development on one side of the property and decrease the impact to the length of the forest perimeter.

While the amount of tree removal is always to be minimized as much as possible, it is of B&L's opinion that when considering the alternative residential developments, the greenhouse gas equivalencies of the project long term, and the current state of forest, the forest removal for the solar farm is the best option.

Decommissioning Plan and Cost Estimate

A Decommissioning Plan has been created for this site by Normal E. Dupuis for the applicant. B&L has reviewed the plan and offers the following comments:

1. The decommissioning plan includes reseeded of the area with native species, but does not specify what. In the Resolution by Putnam Valley Central School District in Opposition to Project, page 2 states that "once the project is completed, almost all of the 15.90 acres disturbed to

construct the project will be returned to grass and meadow". The current site is composed of a lot of trees. If the detention basins are being filled in, and the site is being restored to grasses instead of forested area, the drainage conditions will be changed. The decommissioning plan must either replant trees in the amount and species of trees that are currently there, and/or maintain the existing stormwater mitigation measures to ensure runoff will not be changed.

Visual Analysis

A visual analysis has been conducted on this site via photo simulations. B&L has reviewed the visual analysis and agrees that there is sufficient screening of the solar farm, particularly after the 5 year mark. The visual analysis was also commented on by the Applicant in the Resolution by Putnam Valley Central School District in Opposition to Project on page 2. A formal write up specifically for the visual analysis is requested for final acceptance.

Glare Analysis

A glare study has not yet been completed for this site. It is recommended that a glare analysis be performed on the site in order to assess the potential effects of glare on motorists travelling near the location. The location should also be evaluated as to whether it is within proximity of an airport (< 5 miles) or on a flight path (< 18 miles) of an airport. The FAA solar guidance states that is the responsibility of local governments and solar developers in the vicinity of an airport to check with the airport sponsor and the FAA to ensure there are no potential safety or navigational problems with a proposed solar facility. The FAA should be notified and provided an opportunity to participate in review of the proposed activity and findings of the Glare Analysis. In order to provide a glare analysis, the applicant will need the following:

1. Locations and elevations of existing and proposed contours
2. Locations and elevations of existing and proposed trees and other landscaping
3. Locations and elevations of existing roads
4. Location of existing airports and flight paths

Noise Analysis

A noise study was conducted to assess the impacts of noise from the battery energy storage systems, the inverters and the transformer. The Town of Yorktown has a noise ordinance that prohibits the noise levels from exceeding 60 dBA outside of the wall of any non-participating residence or occupied community building. This study indicated that the 60 dBA contour for the operation activities lies within the property lines and therefore all activities are in compliance with the Town ordinance.

1. Please show the actual locations of all inverters and recalculate the decibels in relation to said locations. All inverters would not be placed where shown in Figure 1.
2. Please depict the Wellness Trail on the noise analysis and ensure that the proposed development will not affect the Wellness Trail.

Permitting Site Plans

In general, the submitted Plans and Documents should be reviewed against the following guidance documents and updated accordingly:

- NYSDAM Guidelines for Solar Energy Projects – Construction Mitigation for Agricultural Lands (Revised 10/18/2019)
- NYSDEC’s Memorandum on Solar Panel Construction Stormwater Permitting/SWPPP Guidance (Dated 02/21/2020)

A review of the plans in accordance with the NYSDAM Guidelines, dated 10/18/2019, will be completed when construction plans are further along. At minimum, the following elements should be addressed in accordance with the requirements of the NYSDAM Guidelines.

3. Include the following general notes on the construction plans:
 - a. The designated Environmental Monitor shall be on site whenever construction or restoration work is occurring on agricultural land and shall coordinate with the NYS Dept. of Ag & Markets, Division of Land and Water Resources, to develop a schedule for inspections and ensure compliance with the Department’s Guidelines for Agricultural Mitigation for Solar Energy Projects, revised 4/19/2018.
 - b. Topsoil sampling, stockpiling, spreading, seeding and site restoration is to be performed in accordance with the NYS Department of Agriculture & Markets Guidelines for Solar Energy Projects Construction Mitigation, revised 10/18/2019.
 - c. The Contractor shall notify Dig Safely New York prior to construction.
4. Add an underground electrical conduit trench detail. Indicate that the conduit or direct bury wires will be buried per NYSDAM guidelines: *All buried utilities located within the generation facility’s security fence must have a minimum depth of 18-inches of cover if buried in a conduit and a minimum depth of twenty-four inches of cover if directly buried (e.g. not routed in conduit).* See NYSDAM guidelines for utilities buried outside of the generation facility security fence.
5. Add a topsoil and vegetative restoration detail to the Plans. Indicate the proposed vegetative surface under the solar array panels.

The following elements should be addressed in accordance with the requirements of the NYSDEC Guidance, dated 02/21/2020:

6. Provide a detail and/or dimensions on the Plans depicting the panel spacing. The individual rows of panels should generally be spaced such that the vegetative area receiving runoff is equal to or greater in length than the disconnected surface (e.g., the width of the row of solar array).
7. Where feasible, solar panels constructed on slopes are to be installed along the contour so that runoff sheet flows downslope. Ensure sheet flow is maintained across the site (i.e., level spreaders to prevent channelized flow).
8. Site plans should include a scale and labelling of contours. Steep slopes (i.e., greater than 15% and 25%) should be identified on the plans, if applicable, and should be addressed with adequate protection (i.e., RECP or TRM).

Additional Environmental Specific Comments:

9. Where the slope exceeds 10% additional BMPs such as infiltration trenches or infiltration berms may be installed downgradient between each row. Refer to PA Stormwater BMP Manual, BMP 6.4.4: Infiltration Trench and BMP 6.4.10: Infiltration Berm and Retentive Grading for additional guidance.
10. Replace silt fence with compost filter sock.
11. Depict the location and extent of prime soils, prime soils if drained, soils of statewide importance, and indicate whether the parcel is receiving an agricultural valuation. Avoid installation of solar rays on the most valuable productive farmland (provided in order of importance of current use: active rotational farmland, permanent hayland, improved pasture, unimproved pasture, other support lands, fallow/inactive farmland), especially when containing prime farmland soils or soils of statewide importance.
12. One tree proposed for planting as a buffer (Eastern Red Cedar) is not the preferred species as it is susceptible to blight and is not deer resistant. It is recommended to explore alternatives that are more deer resistant species such as spruces or pines.

General Comments:

13. Static mounted solar panels shall not be placed on slopes steeper than 25%. It appears that there are at least 3 racks currently that should be removed from plans to maintain this.
14. There currently does not appear to be any information on the plans regarding existing utility connection/proposed electrical equipment sizing and capacity.
15. Plans are currently not showing locations of inverters.
16. Grading/SWPPP Plan (C003) states "Yorktown A Solar Farm 1.9 MW". Please specify if this is AC or DC and if this number includes the panels to the left of the wetlands.
17. Please provide a table stating Type of panel, number of panels, wattage of panels, type of inverters, number of inverters, total number of wattage for DC and AC.
18. Please provide details/specs on type of panels, type of racks, type of inverters, and spacing between racks.
19. Add site distance at the access driveway.
20. Include a note on the Plans indicating maximum panel height (Yorktown zoning regulations state max height is 15 feet in residential zones and 20 feet in other zones).
21. Dimension access driveway length and turning radius. Verify sufficient access and turning movements for emergency vehicles.
22. Plans must be signed by a Professional Engineer or a Registered Architect.

Additional Information and Anticipated Permits/Coordination

In addition to the items noted in the comments above, B&L anticipates the following information and/or documents be submitted in support of the application:

23. PILOT Agreement, if applicable;
24. Confirm whether NYSERDA funding is being used for this project. For NYSERDA projects, the Applicant must submit the NOI to NYSERDA for referral to Ag & Markets. Provide determination of impact from NYSDAM, including acceptable mitigation options as appropriate.

25. An Operations and Maintenance Manual must be submitted, including a map indicating the limits of maintenance for the site Operator/Owner. The Plan should indicate what the future land use plans are for remaining portions of the property situated outside of the fenced solar array and responsibility for the maintenance of the various portions of the site (i.e., mowing, trimming, etc.). The O&M Plan should address the post-construction monitoring requirements per the NYS DAM Guidelines, dated 10/18/2019.
26. Submit correspondence from SHPO indicating that they have conducted their review of the subject property and reached a conclusion of "No Effect".
27. Provide a letter from the Mohegan Volunteer fire department acknowledging receipt of the Plans and verifying approval of proposed access for fire and emergency vehicles.
28. Provide equipment specification sheets and photos for all significant components of the proposed solar facility, including the mounting/tracking systems.
29. Local and State Permits, as required, including for work performed within the highway or right-of-way. Please note that utility poles, signage, parking, etc. should be located on private property and not within the ROW.

B&L is ready to provide an additional round of review once the above requested information is addressed and subsequent materials are submitted. An itemized response to the comments provided herein would be most efficient.

If you have any questions, please do not hesitate to contact me.

Sincerely,

BARTON & LOGUIDICE, D.P.C.

A handwritten signature in blue ink, appearing to read 'Leigh G. Jones', written in a cursive style.

Leigh G. Jones, PLA
Project Manager

NN/LGJ/jms