TOWN OF HENRIETTA
Site Plan Application

APPLICATION NO. _____

PLANNING BOARD ☑ OR ADMINISTRATIVE ☐

DATE: 10/10/23

I (we) EH Henrietta Solar 1 LLC (Name of Applicant / Business) of 318 Timothy Lane (Business Address (Number & Street))

Ontario, NY, 14519 (Town, State, Zip) hereby apply to the Planning Board for

Site Plan Review OR Other: _____

on property located at East Henrietta Rd (Street & Number) Rural Residential (RR) 189.02-1-5 (Zoning District & Tax Account No.)

Previous Reviews, if any, Date: _____ Number: _____

DESCRIPTION OF PROPOSAL: _____

Project 1 is a 6.739 MW-DC, 5 MW-AC array, and will be owned by EH Henrietta Solar 1 LLC under a lease agreement with Lehrwood Estates LLC, c/o Bruce Howlett. The project will be constructed and operated by Sustainable Energy Developments, Inc, D.B.A. GreenSpark Solar. The array will be interconnected to the Rochester Gas & Electric utility grid, with approximately 12,272 modules, on a ground mounted, pier driven racking system. The proposed arrays would occupy approximately 24.63 acres of the 55.38 acre parcel, with an additional area of approximately 1.33 acres of access road outside the fence line. Ground disturbance would be limited to the pier driven posts of the racking system, the electrical trenches, parking/staging area, and the fence line. The power generated by the project is intended for Community Solar Array off-takers through a net metering agreement.

Applicant: EH Henrietta 1 Solar LLC

Address: 318 Timothy Lane
Ontario, NY, 14519

Phone #: [redacted]

Email: [redacted]

Engineer/Architect: Fisher Associates

Address: 180 Charlotte St. Rochester, NY 14607

Phone #: [redacted]

Email:

Property Owner: Lehrwood Estates LLC, c/o Bruce Howlett

Address: 1112 East River Rd
Avon, NY 14414

Phone #: [redacted]

Email: [redacted]

Business Owner: Sustainable Energy Developments, Inc D.B.A. GreenSpark Solar

Address: 318 Timothy Lane
Ontario, NY, 14519

Phone #: [redacted]

Email:

Applicant Signature: _____

Print Name: Kevin Schulte

Statement of Applicant and Owner with Respect to Reimbursement of Professional and Consulting Fees

In conjunction with an application made to the Town of Henrietta, the undersigned states, represents and warrants the following:

1) I/We am/are the applicant and owner with respect to an application to the Town of Henrietta.

2) I/We have been advised of, are aware of and agree to comply with the obligation to reimburse the Town of Henrietta for any and all professional and consulting fees incurred by the Town in conjunction with this and any other applications by me/us, including but not limited to engineering and/or legal fees, all as more fully set forth in the Henrietta Town Code.

3) I/We have been provided with, or have otherwise reviewed the Henrietta Town Code provisions related to the obligation to reimburse the Town with respect to professional and consulting fees, and agree to comply with the same.

4) I/We understand that this obligation shall not be dependent upon the approval or success of the application.

5) I/We further agree that in the event the Town of Henrietta is required to refer for collection an outstanding debt for such professional and/or consulting fees due to the Town of Henrietta, I/we shall be obligated to pay the reasonable attorney's fees incurred as a result of the Town's efforts to collect such fees. Reasonable attorney's fees shall also include any and all disbursements that may result from the commencement of litigation.

6) Each party to the application, including the applicant and the owner, shall be jointly and severally liable for all consulting and professional fees and expenses incurred in conjunction with the application.

Applicant: EH Henrietta Solar 1 LLC

By: Kevin Schulte

Title: CEO

Dated: Oct 4, 2023

Signed: 

Owner: Lehrwood Estates LLC, c/o Bruce Howlett

By: Bruce E Howlett

Title: Single Member/Owner

Dated: Oct 4, 2023

Signed: 
Bruce E Howlett (Oct 4, 2023 08:28 EDT)

October 16, 2023

James W. Grunert, Chair
Town of Henrietta Planning Board
475 Calkins Road
Rochester, NY 14623

Dear Mr. Grunert and Members of the Planning Board,

EH Henrietta Solar 1 LLC, a subsidiary of Sustainable Energy Developments, Inc. DBA GreenSpark Solar, is pleased to submit this application for a Special Use Permit for the Lehigh South Solar 1 Project, a proposed 6.739 MW-DC, 5 MW-AC ground-mounted photovoltaic solar array to be located off of Middle Road in the Town of Henrietta (Tax Parcel 189.02-1-5) within the Rural Residential zoning district. The project will be owned by EH Henrietta Solar 1 LLC under a lease agreement with landowner Lehrwood Estates LLC, and will be constructed and operated by Sustainable Energy Developments, Inc. DBA GreenSpark Solar. The array will interconnect to the Rochester Gas & Electric utility grid with approximately 12,272 modules on a ground mounted, pier driven racking system. The proposed array would occupy approximately 24.63 acres of the 55.38-acre parcel, with an additional area of approximately 1.33 acres of access road outside the fence line. Ground disturbance would be limited to the pier driven posts of the racking system, the electrical trenches, parking/staging area, and the fence line. The power generated by the project is intended for Community Solar Array off-takers through a net metering agreement.

We intend to advance this Lehigh South Solar 1 project in parallel with, and construct it simultaneous to, our proposed Lehigh South Solar 2 project to be located in the area immediately to the east of this proposed project (also within Tax Parcel 189.02-1-5). Please note, as discussed with Chris Martin, P.E. Director of Engineering and Planning, we completed a single Full Environmental Assessment Form (FEAF) for both projects with the intent of advancing a joint coordinated review under SEQR so that interested and involved agencies may review these projects jointly for cumulative impact.

Per § 295-73B of the Town of Henrietta Zoning Code, we understand that this proposal requires Site Plan Review and approval by the Town Planning Board. In parallel, the Town Board is reviewing our application for a Special Use Permit for this project, submitted 10/6/23, in accordance with §295-73D of the zoning code. In addition to this Letter of Intent, this application for site plan review and approval includes the following exhibits in satisfaction of the application requirements and Town Code:

A) Site Plan Application Form with Signed Statement of Applicant and Owner with Respect to Reimbursement of Professional and Consulting Fees

B) Application Fee ($150) and Engineering Plan Review Charge ($700) (both submitted to Amy Englert)
C) Letter of Authorization from property owner
D) 14 complete sets of folded, individually banded Site Plans
E) Site Plan Checklist – Completed
F) SWPPP
G) Environmental Assessment Form (EAF)
    a. SHPO Letter: Finding of No Effect
H) Equipment Specification Sheets
I) Email from NYSERDA demonstrating that NYSDAM Notice of Intent is not required for sites that are not within a State Certified Agricultural District
J) Electronic copy of the entire submission submitted to drawings@henrietta.org

We respectfully request to appear before the Town of Henrietta Planning Board at your regularly scheduled meeting on November 14, 2023 to present our proposal. If any further documentation or information is required please feel free to contact my colleague Brooke Mayer, Commercial Solar Developer at [redacted] or [redacted] We look forward to working with the Town of Henrietta to advance this project in support of the Town's land use and development goals, and in advancement of New York State's clean energy and climate agenda. Thank you for your time and attention.

Sincerely,

Matt Vanderbrook
Director of Commercial Origination

Instructions for Completing Part 1

Part 1 is to be completed by the applicant or project sponsor. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification.

Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information; indicate whether missing information does not exist, or is not reasonably available to the sponsor; and, when possible, generally describe work or studies which would be necessary to update or fully develop that information.

Applicants/sponsors must complete all items in Sections A & B. In Sections C, D & E, most items contain an initial question that must be answered either "Yes" or "No". If the answer to the initial question is "Yes", complete the sub-questions that follow. If the answer to the initial question is "No", proceed to the next question. Section F allows the project sponsor to identify and attach any additional information. Section G requires the name and signature of the applicant or project sponsor to verify that the information contained in Part 1is accurate and complete.

A. Project and Applicant/Sponsor Information.

Name of Action or Project: EH Henrietta Solar 1 Project & EH Henrietta Solar 2 Project		
Project Location (describe, and attach a general location map): East Henrietta Road, Henrietta, NY 14467 [Tax Parcel 189.02-1-5]		
Brief Description of Proposed Action (include purpose or need): The proposed projects are ground-mounted photovoltaic solar arrays that will be located at tax parcel 189.02-1-5. Project 1 is a 6.626 MW-DC, 5 MW-AC array, and Project 2 is a 1.726 MW-DC, 1.425 MW-AC array. The projects will be owned by EH Henrietta Solar 1 LLC and EH Henrietta Solar 2 LLC, respectively, under a lease agreement with Lehrwood Estates LLC, c/o Bruce Howlett. The projects will be constructed and operated by Sustainable Energy Developments, Inc, D.B.A. GreenSpark Solar. The arrays will have separate points of interconnection to the Rochester Gas & Electric utility grid, with Project 1 having approximately 12,272 modules, and Project 2 approximately 3,198 modules on a ground mounted, pier driven racking system. In total, the two proposed arrays would occupy approximately 32.03 acres of the 55.38 acre parcel, with an additional area of approximately 1.33 acres of access road outside the fence line (extending into tax parcel 189.02-1-1.1 via an access easement). Ground disturbance would be limited to the pier driven posts of the racking system, the electrical trenches, parking/staging area, and the fence line. The power generated by the project is intended for Community Solar Array off-takers through a net metering agreement.		
Name of Applicant/Sponsor: EH Henrietta Solar 1 LLC and EH Henrietta Solar 2 LLC	Telephone: [redacted] E-Mail: [redacted]	
Address: 318 Timothy Lane		
City/PO: Ontario	State: NY	Zip Code: 14519
Project Contact (if not same as sponsor; give name and title/role): Matthew Vanderbrook, Director of Commercial Origination, GreenSpark Solar	Telephone: [redacted] E-Mail: [redacted]	
Address: 318 Timothy Lane		
City/PO: Ontario	State: NY	Zip Code: 14519
Property Owner (if not same as sponsor): Lehrwood Estates LLC, c/o Bruce Howlett,	Telephone: [redacted] E-[redacted]	
Address: 1112 East River Rd		
City/PO: Avon	State: NY	Zip Code: 14414

B. Government Approvals

B. Government Approvals, Funding, or Sponsorship. ("Funding" includes grants, loans, tax relief, and any other forms of financial assistance.)

Government Entity	If Yes: Identify Agency and Approval(s) Required	Application Date (Actual or projected)
a. City Counsel, Town Board, or Village Board of Trustees ☑Yes ☐No	Town of Henrietta Town Board (Special Use Permit)	October 2023
b. City, Town or Village Planning Board or Commission ☑Yes ☐No	Town of Henrietta Planning Board (Site Plan Approval)	October 2023
c. City, Town or Village Zoning Board of Appeals ☐Yes ☐No		
d. Other local agencies ☐Yes ☐No		
e. County agencies ☐Yes ☐No		
f. Regional agencies ☐Yes ☐No		
g. State agencies ☑Yes ☐No	SEQR; SHPO Consultation; DEC SWPPP; NYSERDA funding	October 2023
h. Federal agencies ☑Yes ☐No	USFWS Consultation	October 2023

i. Coastal Resources.

i. Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway? ☐Yes ☑No

ii. Is the project site located in a community with an approved Local Waterfront Revitalization Program? ☐Yes ☑No

iii. Is the project site within a Coastal Erosion Hazard Area? ☐Yes ☑No

C. Planning and Zoning

C.1. Planning and zoning actions.

Will administrative or legislative adoption, or amendment of a plan, local law, ordinance, rule or regulation be the only approval(s) which must be granted to enable the proposed action to proceed? ☐Yes ☑No

- **If Yes,** complete sections C, F and G.
- **If No,** proceed to question C.2 and complete all remaining sections and questions in Part 1

C.2. Adopted land use plans.

a. Do any municipally- adopted (city, town, village or county) comprehensive land use plan(s) include the site where the proposed action would be located? ☑Yes ☐No

If Yes, does the comprehensive plan include specific recommendations for the site where the proposed action would be located? ☐Yes ☑No

b. Is the site of the proposed action within any local or regional special planning district (for example: Greenway; Brownfield Opportunity Area (BOA); designated State or Federal heritage area; watershed management plan; or other?) ☑Yes ☐No

If Yes, identify the plan(s):

NYS Heritage Areas:West Erie Canal Corridor

c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, or an adopted municipal farmland protection plan? ☑Yes ☐No

If Yes, identify the plan(s):

Monroe County Agricultural and Farmland Protection Program

C.3. Zoning

a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance. ☑ Yes ☐ No
If Yes, what is the zoning classification(s) including any applicable overlay district?
Rural Residential (RR)

b. Is the use permitted or allowed by a special or conditional use permit? ☑ Yes ☐ No

c. Is a zoning change requested as part of the proposed action? ☐ Yes ☑ No
If Yes,
i. What is the proposed new zoning for the site? _____

C.4. Existing community services.

a. In what school district is the project site located? Rush Henrietta Cent (265001)

b. What police or other public protection forces serve the project site?
New York State Police Troop T Henrietta

c. Which fire protection and emergency medical services serve the project site?
Henrietta Fire Company No.1

d. What parks serve the project site?
N/A

D. Project Details

D.1. Proposed and Potential Development

a. What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if mixed, include all components)? Commercial

b. a. Total acreage of the site of the proposed action? 55.38 acres
b. Total acreage to be physically disturbed? 33.36 acres
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 55.38 acres

c. Is the proposed action an expansion of an existing project or use? ☐ Yes ☑ No
i. If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, miles, housing units, square feet)? % _____ Units: _____

d. Is the proposed action a subdivision, or does it include a subdivision? ☐ Yes ☑ No
If Yes,
i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types)
ii. Is a cluster/conservation layout proposed? ☐ Yes ☑ No
iii. Number of lots proposed? _____
iv. Minimum and maximum proposed lot sizes? Minimum _____ Maximum _____

e. Will the proposed action be constructed in multiple phases? ☐ Yes ☑ No
i. If No, anticipated period of construction: _____ months
ii. If Yes:
- Total number of phases anticipated _____
- Anticipated commencement date of phase 1 (including demolition) _____ month _____ year
- Anticipated completion date of final phase _____ month _____ year
- Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases: _____

f. Does the project include new residential uses? ☐ Yes ☑ No

If Yes, show numbers of units proposed.

	One Family	Two Family	Three Family	Multiple Family (four or more)
Initial Phase	_____	_____	_____	_____
At completion of all phases	_____	_____	_____	_____

g. Does the proposed action include new non-residential construction (including expansions)? ☐ Yes ☑ No

If Yes,

i. Total number of structures _____

ii. Dimensions (in feet) of largest proposed structure: _____height; _____width; and _____ length

iii. Approximate extent of building space to be heated or cooled: _____ square feet

h. Does the proposed action include construction or other activities that will result in the impoundment of any liquids, such as creation of a water supply, reservoir, pond, lake, waste lagoon or other storage? ☐ Yes ☑ No

If Yes,

i. Purpose of the impoundment: _____

ii. If a water impoundment, the principal source of the water: ☐ Ground water ☐ Surface water streams ☐ Other specify:

_____

iii. If other than water, identify the type of impounded/contained liquids and their source.

_____

iv. Approximate size of the proposed impoundment. Volume: _____ million gallons; surface area: _____ acres

v. Dimensions of the proposed dam or impounding structure: _____ height; _____ length

vi. Construction method/materials for the proposed dam or impounding structure (e.g., earth fill, rock, wood, concrete):

_____

D.2. Project Operations

a. Does the proposed action include any excavation, mining, or dredging, during construction, operations, or both? (Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite) ☐ Yes ☑ No

If Yes:

i .What is the purpose of the excavation or dredging? _____

ii. How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site?

- Volume (specify tons or cubic yards): _____
- Over what duration of time? _____

iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them.

_____

_____

iv. Will there be onsite dewatering or processing of excavated materials? ☐ Yes ☐ No

If yes, describe. _____

_____

v. What is the total area to be dredged or excavated? _____acres

vi. What is the maximum area to be worked at any one time? _____ acres

vii. What would be the maximum depth of excavation or dredging? _____ feet

viii. Will the excavation require blasting? ☐ Yes ☐ No

ix. Summarize site reclamation goals and plan: _____

_____

_____

b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, waterbody, shoreline, beach or adjacent area? ☐ Yes ☑ No

If Yes:

i. Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description): _____

_____

ii. Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placement of structures, or alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in square feet or acres:

_____

_____

_____

_____

iii. Will the proposed action cause or result in disturbance to bottom sediments? ☐Yes ☐No

If Yes, describe: _____

iv. Will the proposed action cause or result in the destruction or removal of aquatic vegetation? ☐Yes ☐No

If Yes:

- acres of aquatic vegetation proposed to be removed: _____
- expected acreage of aquatic vegetation remaining after project completion: _____
- purpose of proposed removal (e.g. beach clearing, invasive species control, boat access): _____

_____

- proposed method of plant removal: _____
- if chemical/herbicide treatment will be used, specify product(s): _____

v. Describe any proposed reclamation/mitigation following disturbance: _____

_____

c. Will the proposed action use, or create a new demand for water? ☐Yes ☑No

If Yes:

i. Total anticipated water usage/demand per day: _____ gallons/day

ii. Will the proposed action obtain water from an existing public water supply? ☐Yes ☐No

If Yes:

- Name of district or service area: _____
- Does the existing public water supply have capacity to serve the proposal? ☐Yes ☐No
- Is the project site in the existing district? ☐Yes ☐No
- Is expansion of the district needed? ☐Yes ☐No
- Do existing lines serve the project site? ☐Yes ☐No

iii. Will line extension within an existing district be necessary to supply the project? ☐Yes ☐No

If Yes:

- Describe extensions or capacity expansions proposed to serve this project: _____

_____

- Source(s) of supply for the district: _____

iv. Is a new water supply district or service area proposed to be formed to serve the project site? ☐Yes ☐No

If, Yes:

- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- Proposed source(s) of supply for new district: _____

v. If a public water supply will not be used, describe plans to provide water supply for the project: _____

_____

vi. If water supply will be from wells (public or private), what is the maximum pumping capacity: _____ gallons/minute.

d. Will the proposed action generate liquid wastes? ☐Yes ☑No

If Yes:

i. Total anticipated liquid waste generation per day: _____ gallons/day

ii. Nature of liquid wastes to be generated (e.g., sanitary wastewater, industrial; if combination, describe all components and approximate volumes or proportions of each): _____

_____

_____

iii. Will the proposed action use any existing public wastewater treatment facilities? ☐Yes ☐No

If Yes:

- Name of wastewater treatment plant to be used: _____
- Name of district: _____
- Does the existing wastewater treatment plant have capacity to serve the project? ☐Yes ☐No
- Is the project site in the existing district? ☐Yes ☐No
- Is expansion of the district needed? ☐Yes ☐No

- Do existing sewer lines serve the project site? ☐Yes ☐No
- Will a line extension within an existing district be necessary to serve the project? ☐Yes ☐No

If Yes:

- Describe extensions or capacity expansions proposed to serve this project: _____

iv. Will a new wastewater (sewage) treatment district be formed to serve the project site? ☐Yes ☐No

If Yes:

- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- What is the receiving water for the wastewater discharge? _____

v. If public facilities will not be used, describe plans to provide wastewater treatment for the project, including specifying proposed receiving water (name and classification if surface discharge or describe subsurface disposal plans):

vi. Describe any plans or designs to capture, recycle or reuse liquid waste: _____

e. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point source (i.e. sheet flow) during construction or post construction? ☑Yes ☐No

If Yes:

i. How much impervious surface will the project create in relation to total size of project parcel?

_____ Square feet or 0 acres (impervious surface)

_____ Square feet or 55.38 acres (parcel size)

ii. Describe types of new point sources. No new point sources

iii. Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent properties, groundwater, on-site surface water or off-site surface waters)?

Stormwater will be managed in accordance with the Stormwater Pollution Prevention Plan (SWPPP) developed for this project. Stormwater will be managed on-site.

- If to surface waters, identify receiving water bodies or wetlands: _____
- Will stormwater runoff flow to adjacent properties? ☐Yes ☑No

iv. Does the proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater? ☑Yes ☐No

f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel combustion, waste incineration, or other processes or operations? ☐Yes ☑No

If Yes, identify:

i. Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles)

ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers)

iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation)

g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit, or Federal Clean Air Act Title IV or Title V Permit? ☐Yes ☑No

If Yes:

i. Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet ambient air quality standards for all or some parts of the year) ☐Yes ☐No

ii. In addition to emissions as calculated in the application, the project will generate:

- _____Tons/year (short tons) of Carbon Dioxide (CO_2)
- _____Tons/year (short tons) of Nitrous Oxide (N_2O)
- _____Tons/year (short tons) of Perfluorocarbons (PFCs)
- _____Tons/year (short tons) of Sulfur Hexafluoride (SF_6)
- _____Tons/year (short tons) of Carbon Dioxide equivalent of Hydroflourocarbons (HFCs)
- _____Tons/year (short tons) of Hazardous Air Pollutants (HAPs)

h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)? ☐Yes ☑No

If Yes:

i. Estimate methane generation in tons/year (metric): _____

ii. Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring): _____

i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations? ☐Yes ☑No

If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust):

_____

j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial new demand for transportation facilities or services? ☐Yes ☑No

If Yes:

i. When is the peak traffic expected (Check all that apply): ☐ Morning ☐ Evening ☐Weekend ☐ Randomly between hours of _____ to _____.

ii. For commercial activities only, projected number of truck trips/day and type (e.g., semi trailers and dump trucks): _____

iii. Parking spaces: Existing _____ Proposed _____ Net increase/decrease _____

iv. Does the proposed action include any shared use parking? ☐Yes ☐No

v. If the proposed action includes any modification of existing roads, creation of new roads or change in existing access, describe:

vi. Are public/private transportation service(s) or facilities available within ½ mile of the proposed site? ☐Yes ☐No

vii Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles? ☐Yes ☐No

viii. Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes? ☐Yes ☐No

k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy? ☐Yes ☑No

If Yes:

i. Estimate annual electricity demand during operation of the proposed action: _____

ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other):

iii. Will the proposed action require a new, or an upgrade, to an existing substation? ☐Yes ☐No

l. Hours of operation. Answer all items which apply.

i. During Construction:

- Monday - Friday: 8am - 4pm
- Saturday: N/A
- Sunday: N/A
- Holidays: N/A

ii. During Operations:

- Monday - Friday: Continuous generation
- Saturday: Continuous generation
- Sunday: Continuous generation
- Holidays: Continuous generation

m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both? ☑ Yes ☐ No

If yes:

i. Provide details including sources, time of day and duration:

Noise production may exceed ambient noise levels during construction, primarily during normal weekday business hours. Operation of the solar array project will not exceed ambient noise levels.

ii. Will the proposed action remove existing natural barriers that could act as a noise barrier or screen? ☐ Yes ☑ No

Describe: _____

n. Will the proposed action have outdoor lighting? ☐ Yes ☑ No

If yes:

i. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures:

ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen? ☐ Yes ☑ No

Describe: _____

o. Does the proposed action have the potential to produce odors for more than one hour per day? ☐ Yes ☑ No

If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures: _____

p. Will the proposed action include any bulk storage of petroleum (combined capacity of over 1,100 gallons) or chemical products 185 gallons in above ground storage or any amount in underground storage? ☐ Yes ☑ No

If Yes:

i. Product(s) to be stored _____

ii. Volume(s) _____ per unit time _____ (e.g., month, year)

iii. Generally, describe the proposed storage facilities: _____

q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation? ☐ Yes ☑ No

If Yes:

i. Describe proposed treatment(s):

ii. Will the proposed action use Integrated Pest Management Practices? ☐ Yes ☐ No

r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)? ☑ Yes ☐ No

If Yes:

i. Describe any solid waste(s) to be generated during construction or operation of the facility:

- Construction: < 1 tons per 6 mon (total) (unit of time)
- Operation : _____ tons per _____ (unit of time)

ii. Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:

- Construction: Minimal solar waste will be generated solely during the construction of the project and will be removed by the contractors and disposed of in accordance with proper methods acceptable to NYS.
- Operation: There will be no resulting solid waste from ongoing operations.

iii. Proposed disposal methods/facilities for solid waste generated on-site:

- Construction: removal from site; recycled according to standards; landfill disposal for non-recyclable or reusable materials
- Operation: N/A

s. Does the proposed action include construction or modification of a solid waste management facility? ☐ Yes ☑ No

If Yes:

i. Type of management or handling of waste proposed for the site (e.g., recycling or transfer station, composting, landfill, or other disposal activities): _____

ii. Anticipated rate of disposal/processing:

- _____ Tons/month, if transfer or other non-combustion/thermal treatment, or
- _____ Tons/hour, if combustion or thermal treatment

iii. If landfill, anticipated site life: _____ years

t. Will the proposed action at the site involve the commercial generation, treatment, storage, or disposal of hazardous waste? ☐ Yes ☑ No

If Yes:

i. Name(s) of all hazardous wastes or constituents to be generated, handled or managed at facility: _____

ii. Generally describe processes or activities involving hazardous wastes or constituents: _____

iii. Specify amount to be handled or generated _____ tons/month

iv. Describe any proposals for on-site minimization, recycling or reuse of hazardous constituents: _____

v. Will any hazardous wastes be disposed at an existing offsite hazardous waste facility? ☐ Yes ☐ No

If Yes: provide name and location of facility: _____

If No: describe proposed management of any hazardous wastes which will not be sent to a hazardous waste facility:

E. Site and Setting of Proposed Action

E.1. Land uses on and surrounding the project site

a. Existing land uses.

i. Check all uses that occur on, adjoining and near the project site.

☐ Urban ☑ Industrial ☑ Commercial ☑ Residential (suburban) ☑ Rural (non-farm)
☐ Forest ☐ Agriculture ☐ Aquatic ☐ Other (specify): _____

ii. If mix of uses, generally describe:

Rural Residential District

b. Land uses and covertypes on the project site.

Land use or Covertype	Current Acreage	Acreage After Project Completion	Change (Acres +/-)
• Roads, buildings, and other paved or impervious surfaces	0 acres	1.33 acres	+1.33 acres
• Forested	14.7 acres	11.43 acres	-3.27 acres
• Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)	38.12 acres	9.36 acres	-28.76 acres
• Agricultural (includes active orchards, field, greenhouse etc.)			
• Surface water features (lakes, ponds, streams, rivers, etc.)			
• Wetlands (freshwater or tidal)	2.56 acres	2.56 acres	0
• Non-vegetated (bare rock, earth or fill)			
• Other Describe: Solar array		32.03 acres	+32.03 acres

c. Is the project site presently used by members of the community for public recreation? ☐ Yes ☑ No

i. If Yes: explain: _____

d. Are there any facilities serving children, the elderly, people with disabilities (e.g., schools, hospitals, licensed day care centers, or group homes) within 1500 feet of the project site? ☑ Yes ☐ No

If Yes,

i. Identify Facilities:

Episcopal SeniorLife - Brentland Woods

e. Does the project site contain an existing dam? ☐ Yes ☑ No

If Yes:

i. Dimensions of the dam and impoundment:

- Dam height: _____ feet
- Dam length: _____ feet
- Surface area: _____ acres
- Volume impounded: _____ gallons OR acre-feet

ii. Dam's existing hazard classification: _____

iii. Provide date and summarize results of last inspection:

f. Has the project site ever been used as a municipal, commercial or industrial solid waste management facility, or does the project site adjoin property which is now, or was at one time, used as a solid waste management facility? ☑ Yes ☐ No

If Yes:

i. Has the facility been formally closed? ☑ Yes ☐ No

- If yes, cite sources/documentation: NYS DEC Environmental Site Remediation Database

ii. Describe the location of the project site relative to the boundaries of the solid waste management facility:

Lehigh Station Road and Middle Road, about 2,000 feet from the site

iii. Describe any development constraints due to the prior solid waste activities: _____

None for the project site

g. Have hazardous wastes been generated, treated and/or disposed of at the site, or does the project site adjoin property which is now or was at one time used to commercially treat, store and/or dispose of hazardous waste? ☐ Yes ☑ No

If Yes:

i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred:

h. Potential contamination history. Has there been a reported spill at the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site? ☑ Yes ☐ No

If Yes:

i. Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? Check all that apply: ☑ Yes ☐ No

☑ Yes – Spills Incidents database — Provide DEC ID number(s): 8900637

☐ Yes – Environmental Site Remediation database — Provide DEC ID number(s): _____

☐ Neither database

ii. If site has been subject of RCRA corrective activities, describe control measures: _____

iii. Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database? ☑ Yes ☐ No

If yes, provide DEC ID number(s): 828037

iv. If yes to (i), (ii) or (iii) above, describe current status of site(s):

Closed dump, inactive site with re-vegetated surface

v. Is the project site subject to an institutional control limiting property uses? ☐ Yes ☑ No

- If yes, DEC site ID number: _____
- Describe the type of institutional control (e.g., deed restriction or easement): _____
- Describe any use limitations: _____
- Describe any engineering controls: _____
- Will the project affect the institutional or engineering controls in place? ☐ Yes ☑ No
- Explain: _____

E.2. Natural Resources On or Near Project Site

a. What is the average depth to bedrock on the project site? > 6.5 feet

b. Are there bedrock outcroppings on the project site? ☐ Yes ☑ No
If Yes, what proportion of the site is comprised of bedrock outcroppings? _____ %

c. Predominant soil type(s) present on project site:

Ontario loam (OnB)	29.4 %
Ontario loam (OnC)	20.6 %
Wayland soils complex	10.9 %

d. What is the average depth to the water table on the project site? Average: 4.59 feet

e. Drainage status of project site soils:
☑ Well Drained: 65.5 % of site
☑ Moderately Well Drained: 13.2 % of site
☑ Poorly Drained 21.4 % of site

f. Approximate proportion of proposed action site with slopes:
☑ 0-10%: 64 % of site
☑ 10-15%: 26.4 % of site
☑ 15% or greater: 9.7 % of site

g. Are there any unique geologic features on the project site? ☐ Yes ☑ No
If Yes, describe: _____

h. Surface water features.
i. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)? ☑ Yes ☐ No
ii. Do any wetlands or other waterbodies adjoin the project site? ☑ Yes ☐ No
If Yes to either *i* or *ii*, continue. If No, skip to E.2.i.
iii. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency? ☑ Yes ☐ No
iv. For each identified regulated wetland and waterbody on the project site, provide the following information:

- Streams: Name 821-9 Classification C
- Lakes or Ponds: Name _____ Classification _____
- Wetlands: Name Federal Waters, Federal Waters, Federal Waters,... Approximate Size _____
- Wetland No. (if regulated by DEC) _____

v. Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies? ☑ Yes ☐ No
If yes, name of impaired water body/bodies and basis for listing as impaired: _____
Name - Pollutants - Uses:Red Creek and tributaries – Unknown Toxicity – Recreation;Aquatic Life

i. Is the project site in a designated Floodway? ☑ Yes ☐ No

j. Is the project site in the 100-year Floodplain? ☑ Yes ☐ No

k. Is the project site in the 500-year Floodplain? ☑ Yes ☐ No

l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer? ☐ Yes ☑ No
If Yes:
i. Name of aquifer: _____

m. Identify the predominant wildlife species that occupy or use the project site:
Small Mammals Deer

n. Does the project site contain a designated significant natural community? ☐Yes ☑No
If Yes:
i. Describe the habitat/community (composition, function, and basis for designation):
ii. Source(s) of description or evaluation:
iii. Extent of community/habitat:
- Currently: acres
- Following completion of project as proposed: acres
- Gain or loss (indicate + or -): acres

o. Does project site contain any species of plant or animal that is listed by the federal government or NYS as endangered or threatened, or does it contain any areas identified as habitat for an endangered or threatened species? ☐Yes ☑No

If Yes:
i. Species and listing (endangered or threatened):

p. Does the project site contain any species of plant or animal that is listed by NYS as rare, or as a species of special concern? ☐Yes ☑No

If Yes:
i. Species and listing:

q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing? ☐Yes ☑No
If yes, give a brief description of how the proposed action may affect that use:

E.3. Designated Public Resources On or Near Project Site

a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? ☑Yes ☐No
If Yes, provide county plus district name/number: MONRcn6

b. Are agricultural lands consisting of highly productive soils present? ☑Yes ☐No
i. If Yes: acreage(s) on project site? 25 acres
ii. Source(s) of soil rating(s): NRCS Soil Map; 2023 NEW YORK AGRICULTURAL LAND CLASSIFICATION - MONROE - JANUARY 1, 2023

c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark? ☐Yes ☑No
If Yes:
i. Nature of the natural landmark: ☐ Biological Community ☐ Geological Feature
ii. Provide brief description of landmark, including values behind designation and approximate size/extent:

d. Is the project site located in or does it adjoin a state listed Critical Environmental Area? ☐Yes ☑No
If Yes:
i. CEA name:
ii. Basis for designation:
iii. Designating agency and date:

e. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places? ☐ Yes ☑ No

If Yes:

i. Nature of historic/archaeological resource: ☐ Archaeological Site ☐ Historic Building or District

ii. Name: _____

iii. Brief description of attributes on which listing is based:

_____

f. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory? ☑ Yes ☐ No

g. Have additional archaeological or historic site(s) or resources been identified on the project site? ☐ Yes ☑ No

If Yes:

i. Describe possible resource(s): _____

ii. Basis for identification: _____

h. Is the project site within fives miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource? ☑ Yes ☐ No

If Yes:

i. Identify resource: Genesee Valley Greenway, Lehigh Valley Trail Park

ii. Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.): State Trail, County Park

iii. Distance between project and resource: 4.5,.01 miles.

i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR 666? ☐ Yes ☑ No

If Yes:

i. Identify the name of the river and its designation: _____

ii. Is the activity consistent with development restrictions contained in 6NYCRR Part 666? ☐ Yes ☐ No

F. Additional Information

Attach any additional information which may be needed to clarify your project.

If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

G. Verification

I certify that the information provided is true to the best of my knowledge.

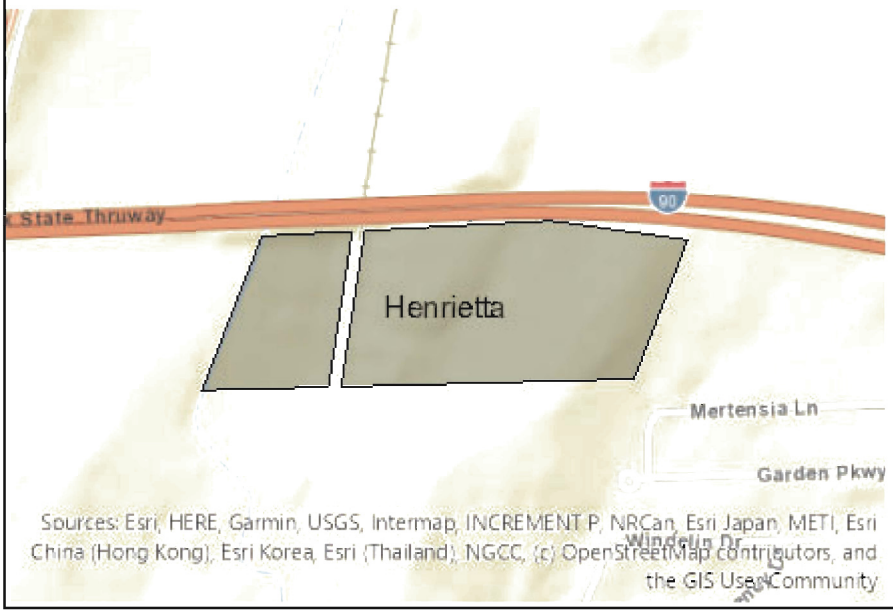
Applicant/Sponsor Name EH Henrietta Solar 1 LLC / EH Henrietta Solar 2 Date 10/6/2023

Signature _____ Title Manager

PRINT FORM

EAF Mapper Summary Report

Friday, September 8, 2023 3:31 PM



Disclaimer: The EAF Mapper is a screening tool intended to assist project sponsors and reviewing agencies in preparing an environmental assessment form (EAF). Not all questions asked in the EAF are answered by the EAF Mapper. Additional information on any EAF question can be obtained by consulting the EAF Workbooks. Although the EAF Mapper provides the most up-to-date digital data available to DEC, you may also need to contact local or other data sources in order to obtain data not provided by the Mapper. Digital data is not a substitute for agency determinations.

B.i.i [Coastal or Waterfront Area]	No
B.i.ii [Local Waterfront Revitalization Area]	No
C.2.b. [Special Planning District]	Yes - Digital mapping data are not available for all Special Planning Districts. Refer to EAF Workbook.
C.2.b. [Special Planning District - Name]	NYS Heritage Areas:West Erie Canal Corridor
E.1.h [DEC Spills or Remediation Site - Potential Contamination History]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Listed]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Environmental Site Remediation Database]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.iii [Within 2,000' of DEC Remediation Site]	Yes
E.1.h.iii [Within 2,000' of DEC Remediation Site - DEC ID]	828037
E.2.g [Unique Geologic Features]	No
E.2.h.i [Surface Water Features]	Yes
E.2.h.ii [Surface Water Features]	Yes
E.2.h.iii [Surface Water Features]	Yes - Digital mapping information on local and federal wetlands and waterbodies is known to be incomplete. Refer to EAF Workbook.
E.2.h.iv [Surface Water Features - Stream Name]	821-9
E.2.h.iv [Surface Water Features - Stream Classification]	C
E.2.h.iv [Surface Water Features - Wetlands Name]	Federal Waters
E.2.h.v [Impaired Water Bodies]	Yes

E.2.h.v [Impaired Water Bodies - Name and Basis for Listing]	Name - Pollutants - Uses:Red Creek and tributaries – Unknown Toxicity – Recreation;Aquatic Life
E.2.i. [Floodway]	Yes
E.2.j. [100 Year Floodplain]	Yes
E.2.k. [500 Year Floodplain]	Yes
E.2.l. [Aquifers]	No
E.2.n. [Natural Communities]	No
E.2.o. [Endangered or Threatened Species]	No
E.2.p. [Rare Plants or Animals]	No
E.3.a. [Agricultural District]	Yes
E.3.a. [Agricultural District]	MONRcn6
E.3.c. [National Natural Landmark]	No
E.3.d [Critical Environmental Area]	No
E.3.e. [National or State Register of Historic Places or State Eligible Sites]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.3.f. [Archeological Sites]	Yes
E.3.i. [Designated River Corridor]	No

October 16, 2023

Steve Schultz, Town of Henrietta Supervisor
Town of Henrietta Town Board
475 Calkins Road
Rochester, NY 14623

Dear Mr Schultz and Members of the Board,

We are submitting this updated Incentive Zoning Application per § 295-34.13 of the Town Code, in support of our Special Use Permit applications for the Lehigh South Solar 1 and Lehigh South Solar 2 projects. The proposed projects are two adjacent ground-mounted photovoltaic solar arrays that will be located within tax parcel 189.02-1-5, measuring at 6.739 MW-DC, 5 MW-AC and 2.414 MW-DC, 1.875 MW-AC, respectively. The projects will be owned by GreenSpark Solar subsidiaries EH Henrietta Solar 1 LLC and EH Henrietta Solar 2 LLC, respectively under a lease agreement with landowner Lehrwood Estates LLC, and constructed and operated by Sustainable Energy Developments, Inc, D.B.A. GreenSpark Solar

As part of our Special Use Permit Application submittal, we previously submitted a letter dated October 5, 2023 detailing our intent to meet, to the greatest extent possible the conservation easement requirement detailed in Town Code §295-73D(20) *Additional requirements for large-scale solar energy systems* which requires that *"Agricultural conservation easements and/or deed restrictions, in a form acceptable to the Town, shall restrict nonagricultural activities on 75% of the total eligible farm acreage and shall be filed and recorded with the Monroe County Clerk's Office prior to the issuance of a building permit."* Under this provision, the corresponding preservation requirements would have been as follows.

Project Name	Address	Tax Parcel	Project Area (Acres)	Protected Farmland Req. (Acres)
Lehigh South Solar 1	East Henrietta Rd Henrietta, NY 14467	189.02-1-5	24.63	73.89
Lehigh South Solar 2	East Henrietta Rd Henrietta, NY 14467	189.02-1-5	7.40	22.2
TOTAL			32.03	96.09

In reviewing our initial Special Use Permit Application submission, the Town confirmed that because this project will not be developed on active farmland pursuant to §295-73A of the Town Code, this project would need to pursue a waiver / relief of area or dimensional requirements through the Town's Incentive Zoning Code (Article IXB). Accordingly, we are submitting this updated Incentive Zoning Application reflective of this approach. Specifically we are seeking the incentive provided for under § 295-34.11C(1) of a waiver of the area / dimensional requirements required under §295-73D(20) of the Town's solar code (to secure an agricultural conservation easement across 96.09 acres) in exchange for sufficient qualifying amenities in accordance with § 295-34.11

We, in partnership with project site landowner Lehrwood Estates LLC would commit to providing one of the following amenities in exchange for this incentive:

Option	Amenity	Amenity Category	Description	Approx. Value
1	Lehigh Valley Trail vehicular access improvements	§295-34.12C(2)	GreenSpark Solar would enhance access road from Middle Road to support vehicular and community access to the Lehigh Valley Trail	$100,000
2	Donate area at the northeast corner of tax parcel 189.02-1-5 to Town of Henrietta	§295-34.12C(2)	Lehrwood Estates LLC / Howlett Farms would deed 4-5 acres to the Town of Henrietta to develop trailhead and parking area at Lehigh Valley Trail connection	$100,000
3	Develop walking trails and convey public access easement across portion of tax parcel 189.02-1-5	§295-34.12C(4)	Lehrwood Estates LLC / Howlett Farms would develop nature walking trails, and enhance the area with pollinator species, pond access and gardens, and convey a public access easement cross a portion of tax parcel 189.02-1-5, west of the Lehigh Valley Trail, to improve pedestrian connectivity to the trail and provide additional open space amenities to the public	$75,000 - $100,000

None of the amenities proposed above would otherwise result from the project without the granting of the requested incentive as they do not hold utility specific to the project's goals, and are therefore outside of the base project scope

In facilitating the development of these projects which will deliver clean, renewable sources of energy to the RG&E utility grid, the requested incentive would support the Town of Henrietta's progress toward a sustainable community as stated in the Town Sustainability Committee's Mission This project will advance the Town of Henrietta as a model clean energy community contributing directly toward New York State's ability to meet its distributed solar portfolio targets as mandated by the NYS Climate Leadership and Community Protection Act (Climate Act) signed into law in July 2019. The Climate Act requires New York to achieve 6,000 megawatts (MW) of distributed solar by 2025, and 10,000 MW by 2030, and a just transition to a clean energy economy that creates good paying jobs and fosters healthy communities. This is inherently a collective effort across New York State municipalities, and this project would position the Town of Henrietta as a key participant in this effort.

In addition, the incentive zoning amenities proposed above would advance many of the Town's land use goals and policies, namely:

- 2016 Active Transportation Plan: Each of these amenities would improve and enhance access to the Lehigh Valley Trail that runs north-south, connecting Henrietta with off-road bike and pedestrian connections to destinations in Henrietta, Brighton, Rochester and Rush. These improvements would support the Town's goal to provide a variety of transportation choices in the community including pedestrian pathways and shared-use trails.
- 2019 Comprehensive Land Use Plan: As a complement to the adjacent Masonic Care Community and Lehigh Ridge residential developments, currently underway by expanding accessibility to open space and the Town's trail network each of these amenities would advance the plan's smart growth goals to 4) Create walkable neighborhoods. 5) Foster distinctive, attractive communities with a strong sense of place, and 6) Preserve open space.

We look forward to discussing these potential improvements with you in support of this project and the Town of Henrietta's land use and development goals.

Sincerely,

Kevin Schulte
CEO. GreenSpark Solar
Manager, EH Henrietta Solar 1 LLC
Manager EH Henrietta Solar 2 LLC

SITE PLAN CHECKLIST

PROJECT NAME: Lehigh South Solar 1 APPLICATION No. _____

☒ 1 Acceptable plans size to match the New York State Legal Filing Size (22" x 34"), prepared with india ink on mylar. (Mylar not required by C. Martin)

2 Except in the simplest form of site plan application, the proposal package should contain at least the following drawings:

☒ a. Site Plan
☒ b. Utility Plan
☒ c. Grading Plan
☒ d. Landscape Plan
☐ e. Lighting Plan (N/A)
☒ f. Profiles and Construction Details
☐ g. Building Elevations (N/A)

3 The Title Block should contain the following:

☒ a. Proposed Name of Development
☒ b. Location of Development
☒ c. Name, Address, and Telephone Number of Developer or Applicant
☒ d. Name, Address, and Seal of Engineer, Architect, and/or Land Surveyor

☒ 4 Show General Location Map (sketch). North should be located at the top of the drawing.

☐ 5 A scale of not more than fifty feet to the inch is to be used.
(waived by printing 100' = 1 inch at larger size, per C. Martin)

☒ 6 Show names and tax account numbers of adjacent lands.

☒ 7 Indicate zoning by note. If more than one area, delineate the zoning on the plan view.

☒ 8 By plan note, list all variances and special permits accompanied by Application Number and approval date.

☒ 9 Show dimensions and bearings or angles of all property boundary lines. Show area to nearest square foot and 0.00+ acres

☒ 10 Show a tie distance from the proposed site to nearest road intersection

☒ 11 Show location width and type of all existing and/or proposed easements on the plan. Also, tabulate all of the easements on the plan and key by identifying numbers.
[Proposed easements for trail access still being coordinated; an updated ALTA map will be submitted by 12/1]

SITE PLAN CHECKLIST

PROJECT NAME: Lehigh South Solar 1 APPLICATION No. _____

☒ 12 All State, County, and Town Survey Monuments on the site and within 100 feet of the site must be shown. Indicate on the plan the proposed protection from damage for the "on site" monuments. If no monuments exist on the site, a certifiction to that affect shall be placed on the plan by the surveyor.

☒ 13 A Letter of Credit in the amount of $1,000.00 per monument will be required as protective measure for all Town, County, State, and Federal Monuments on site or those affected by the proposed construction.

☒ 14 List the names of existing streets, their legal width, and jurisdiction.

☒ 15 Show all existing driveways (curb cuts) within two hundred (200) feet of the proposed development as well as driveways (curb cuts) within two hundred (200) feet on the opposite side of the road.

☐ 16 Show planned use for the proposed structure (i.e. office etc). [N/A]

☒ 17 Show proposed and/or existing setbacks.

☒ 18 Show parking requirements (indicate the proposed and required).

☒ 19 Show the fire lanes.

20 The Landscaping Plan must be of the same scale as the Site Plan and contain the following minimums:

☒ a. To scale plot of proposed trees and/or shrubs
☒ b. The plan must contain a table of quantities. ***See Appendix for proper requirements.***
☒ c. Enlargement details for areas of proposal that are not legible at the plan scale.
☐ d. The Planning Board requires that the Landscape Plan be signed off by a Licensed Landscape Architect or Certified Nursery Professional.
☒ e. The Planning Board may also require that the proposed landscape be installed by a Certified New York State Nurseryman.
☒ f. The Planning Board may require a Letter of Credit in the amount of the Landscape Contract and that the Letter of Credit be for a two year period to guarantee growth.
☒ g. The Planning Board may also require that a Landscape Record Drawing, certified by a Licensed Archited, be provided. (Note: a Letter of Credit will be required to insure completion.)

☐ 21 All architecture plans must include elevation drawings of the proposed structure and be fully dimensioned, horizontally and vertically. (N/A)

SITE PLAN CHECKLIST

PROJECT NAME: Lehigh South Solar 1 APPLICATION No. _____

- ☐ 22 Indicate the architectural treatment of the proposed and/or existing buildings, including the type and color of the proposed finish materials. All proposed buildinngs should have a masonry front (road view) elevation. Renovation to existing buildings will be evaluated on an individual basis. (N/A)

- ☐ 23 Please plan to bring samples of the proposed architectural materials to the meeting. (N/A)

- ☐ 24 The following statement should appear on all Site Plans:
  "As an integral part of this approval, the Planning Board expressly approves the color, textures, and finish of the building as depicted on site elevations or other documents submitted with this application. Any proposed change in color, texture, or finish of the building, from that approved by the Planning Board shall require a re-application for review and approval of the Planning Board." (N/A)

- ☐ 25 A separate Lighting Plan will be provided showing the proposed lighting to the nearest candle power, as measured at ground level. See Appendix. (N/A)

- ☐ 26 Indicate existing and/or proposed lighting locations, including height, type, and wattage. The Planning Board may require that a Lighting Record Plan certified by a Professional Engineer by supplied. N/A)

- ☒ 27 Show existing and proposed contours based on U.S.C. & G.S. Datum. Reference source of datum and show plan benchmarks. All contours shall be carried a minimum of one hundred (100) feet offsite.
- ☒ 28 Show existing drainage system and proposed drainage system. Storm drainage to offsite facilities must be shown on plan and profile to the satisfaction of the Town Engineering Department.

- ☒ 29 If the parking lot is to be used for stormwater detention, limits of this area are to be indicated on the site and grading plans.
- ☒ 30 Show wetland and buffer zone limits (when applicable).

- ☒ 31 Show floodplain and floodway limits (when applicable).

- ☒ 32 In plan and profile, show location, size, rim elevations, and all invert elevations of the existing sanitary sewers. Include the nearest manhole on either side of the proposed development.

- ☐ 33 In plan and profile, show location of the proposed sanitary sewer systems including sewer systems including proposed laterals (plan only). Include all proposed elevations, grades, pipe

SITE PLAN CHECKLIST

PROJECT NAME: Lehigh South Solar 1 APPLICATION No. _____

sizes, and details of any water crossings. (N/A)

☐ 34 Show location and size of proposed water services and/or watermains including shutoff valves. N/A

☐ 35 Show location of fire protection systems components. N/A

☐ 36 Show location of dumpster (when applicable). All dumpsters must be enclosed in a masonry enclosure on three side with a gate on the fourth and shall be finished to match the proposed or existing structure. The closure should not be visible to the public. N/A

☐ 37 Indicate a curbed landscape mall with a minimum width of twenty (20) feet as required in commercial lands and industrial lands granted commercial use by special permit. Full depth cast-in-place concrete curb or granite curb must be installed. N/A

☒ 38 The Site Plan must be prepared from a current Instrument Survey (less than 12 months old). The Instrument Survey shall be certified as having been prepared using the current New York State Association of Professional Land Surveyors (NYSAPLS) Code of Practice and the Genesee Valley Land Surveyors Association - Monroe County Bar Association (GVLSA-MCBA) Standards. Credit the Instrument Survey and supply four copies of the map the Town Engineer.

☐ 39 If the site contains materials to be buried on site, the Burial Area should be outlined on the Site and Grading Plan. N/A

☐ 40 Site distance, existing and required, must be shown at driveway locations on all main roads. See Appendix.

☒ 41 Upon Site Plan Approval, a Letter of Credit shall be furnished to ensure site plan improvements and requirements. See Appendix.

☒ 42 Required supporting data and/or Reports:

a. Environmental Assessment Form (one copy) (Short Form or Part 1 Long Form)
b. Drainage Report (two copies)
c. Traffic Report if required (twelve copies) N/A
d. Lighting catalog cuts (copy with each set of plans) N/A
e. Architectural Renderings N/A
f. Letter of Credit Estimate (one copy). TBD
g. Engineering Review Charge and Engineering Site Inspection Charge Form.

SITE PLAN CHECKLIST

PROJECT NAME: Lehigh South Solar 1 APPLICATION No. _____

See Appendix.

- ☐ 43 Thirty (30) sets of folded plans will be required
  [Submitting 14 full size sets per J. Miranda and C. Martin]
- ☐ 44 Is this project a TYPE I Action? If so, then an additional seven (7) sets of plans will be required for the Coordinated Review process (37 sets of plans total).
  [Submitting 14 full size sets per J. Miranda and C. Martin]

Prepared for: EH Henrietta Solar 1 LLC — 10/17/23

Name of Developer — Date

Sustainable Energy Developments Inc, D.B.A. GreenSpark Solar

Company Name

318 Timothy Lane

Street Address

Ontario, NY 14519

City, State, Zip

SITE PLAN CHECKLIST

PROJECT NAME: Lehigh South Solar 1 APPLICATION No. _____

Telephone Number

Dwgs
Prepared by: Steven Mellott, PE, CFM 10/16/2023
Name of Consultant Date

Fisher Associates, P.E., L.S., L.A., D.P.C
Company Name

180 Charlotte St
Street Address

Rochester, NY 14607
City, State, Zip

[redacted]
Telephone Number

SITE PLAN CHECKLIST
APPENDIX

1 Landscape Table

2 Sight Distance Table

3 Short Environmental Form

4 Letter of Credit Summary

5 Plan Review Charge and Site Inspection Charge Form Letter

6 Engineering Review Charge and Engineering Site Inspection Charge Form

7 Sample Lighting Plan

LANDSCAPE TABLE

1 The Landscape Table must include identification symbol, quantities, common name, botanical name, caliper for deciduous trees, or heights for evergreen trees, and a remarks column.

2 All deciduous trees must be a minimum of 3 inches to 3 1/2 inches in diameter, as measured at caliper (6 inches above ground).

3 All ornamental deciduous trees must be a minimum of 2 1/2 inches to 3 inches in diameter, as measured at caliper (6 inches above ground).

4 All evergreen trees must be a minimum height of 6 feet to 8 feet, unless otherwise requested, bagged and balled.

5 Low shrubs should be a minimum of 24 inches high.

6 Along arterial and collector roads, the Planning Board requires the use of salt resistant species.

Application Number: _____

Site Plan and Subdivision Application
Engineering Review Charges

All Site Plan and Subdivision Applications are subject to be reviewed by the Town Engineering Department and/or Consultant Forces. All costs incurred in providing this service are a direct charge to the Applicant or his designee. The responsible person and/or party in this matter shall be identified in the following listing:

Responsible Individual: Kevin Schulte

Responsible Firm: EH Henrietta Solar 1 LLC / GreenSpark Solar

Street Address: 318 Timothy Lane

City, State, Zip Code: Ontario, NY 14519

Telephone Number: ([redacted]

Engineering Site Inspection Charges

All Residential and Business Development are subject to be inspected by the Town Engineering Department and/or Consultant Forces. All costs incurred in providing this service are a direct charge to the Applicant or his designee. The responsible person and/or party in this matter shall be identified in the following listing:

Responsible Individual: Kevin Schulte

Responsible Firm: EH Henrietta Solar 1 LLC / GreenSpark Solar

Street Address: 318 Timothy Lane

City, State, Zip Code: Ontario, NY 14519

Telephone Number: ([redacted]

Note: When this information has been provided by another party, the following information needs to be provided:

Provided By _____

Address _____

City, State Zip _____

Telephone Number ( ) _____

SG125HV

String Inverter for 1500 Vdc System

SUNGROW
Clean power for all

HIGH YIELD

- Patented five-level topology, max. efficiency 98.9 %, European efficiency 98.7 %, CEC efficiency 98.5 %
- Full power operation without derating at 50 ℃
- Patented anti-PID function

EASY O&M

- Virtual central solution, easy for O&M
- Compact design and light weight for easy installation

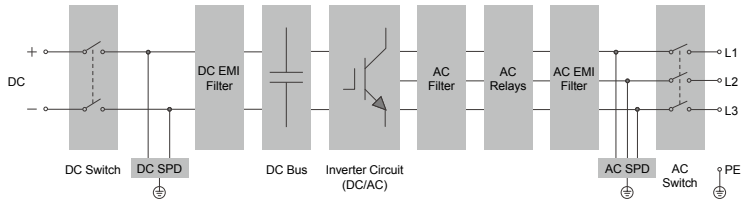
SAVED INVESTMENT

- DC 1500V,AC 600V, low system initial investment
- 1 to 5MW power block design for lower AC transformer and labor cost
- Max.DC/AC ratio up to 1.5

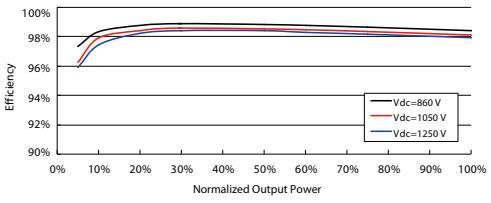
GRID SUPPORT

- Compliance with both IEC and UL safety,EMC and grid support regulations
- Low/High voltage ride through(L/HVRT)
- Active & reactive power control and power ramp rate control

CIRCUIT DIAGRAM



EFFICIENCY CURVE



Type designation	SG125HV
Input (DC)	
Max. PV input voltage	1500 V
Min. PV input voltage / Start-up input voltage	860 V / 920 V
Nominal PV input voltage	1050 V
MPP voltage range	860 – 1450 V
MPP voltage range for nominal power	860 – 1250 V
No. of independent MPP inputs	1
No. of DC inputs	1
Max. PV input current	148 A
Max. DC short-circuit current	250 A
Output (AC)	
AC output power	125 kVA @ 50 ℃
Max. AC output current	120 A
Nominal AC voltage	3 / PE, 600 V
AC voltage range	480 – 690 V
Nominal grid frequency / Grid frequency range	50 Hz / 45 – 55 Hz, 60 Hz / 55 – 65 Hz
THD	< 3 % (at nominal power)
DC current injection	< 0.5 % In
Power factor at nominal power / Adjustable power factor	> 0.99 / 0.8 leading - 0.8 lagging
Feed-in phases / connection phases	3 / 3
Efficiency	
Max. efficiency / European efficiency	98.9% / 98.7%
CEC efficiency	98.5%
Protection	
DC reverse connection protection	Yes
AC short-circuit protection	Yes
Leakage current protection	Yes
Grid monitoring	Yes
DC switch	Yes
AC switch	Yes
Q at night function	No
Anti-PID function	Yes
Overvoltage protection	DC Type II / AC Type II
General Data	
Dimensions (W*H*D)	670*902*296 mm 26.4''*35.5''*11.7''
Weight	76 kg 167.5 lb
Isolation method	Transformerless
Degree of protection	IP 65 NEMA 4X
Night power consumption	< 4 W
Operating ambient temperature range	-30 to 60 ℃ (> 50 ℃ derating) -22 to 140 ℉ (> 122 ℉ derating)
Allowable relative humidity range (non-condensing)	0 – 100 %
Cooling method	Smart forced air cooling
Max. operating altitude	4000 m (> 3000 m derating) 13123 ft (> 9843 ft derating)
Display / Communication	LED, Bluetooth+APP / RS485
DC connection type	OT or DT terminal (Max. 185 mm² 350 Kcmil)
AC connection type	OT or DT terminal (Max. 185 mm² 350 Kcmil)
Compliance	UL1741, UL1741SA, IEEE1547, IEEE1547.1, CSA C22.2 107.1-01-2001, FCC Part15 Sub-part B Class A Limits, California Rule 21, IEC 62109-1/-2, IEC 61000-6-2/-4, IEC 61727, IEC62116, BDEW, EN50549,VDE-AR-N 4110:2018, VDE-AR-N 4120:2018, UNE 206007-1:2013, P.O.12.3, UTE C15-712-1:2013, CEI 0-16:2017, IEC 61683, PEA, NTCO
Grid Support	LVRT, HVRT, ZVRT, active & reactive power regulation, PF control, soft start/stop

Q.PEAK DUO XL-G11 SERIES

qcells

570 - 585 Wp | 156 Cells
21.4 % Maximum Module Efficiency

MODEL Q.PEAK DUO XL-G11.3 / BFG

Bifacial energy yield gain of up to 20 %

Bifacial Q.ANTUM solar cells make efficient use of light shining on the module rear-side for radically improved LCOE.

Low electricity generation costs

Q.ANTUM DUO Z combines cutting edge cell separation and innovative wiring with Q.ANTUM Technology for higher yield per surface area, lower BOS costs, higher power classes, and an efficiency rate of up to 21.4 %.

A reliable investment

Double glass module design enables extended lifetime with 12-year product warranty and improved 30-year performance warranty[1].

Enduring high performance

Long-term yield security with Anti LeTID and Anti PID Technology[2], Hot-Spot Protect.

Frame for versatile mounting options

High-tech aluminum alloy frame protects from damage, enables use of a wide range of mounting structures and is certified regarding IEC for high snow (5400 Pa) and wind loads (2400 Pa).

Innovative all-weather technology

Optimal yields, whatever the weather with excellent low-light and temperature behavior.

[1] See data sheet on rear for further information.
[2] APT test conditions according to IEC/TS 62804-1:2015 method B (–1500 V, 168 h) including post treatment according to IEC 61215-1-1 Ed. 2.0 (CD)

The ideal solution for:

Ground mounted solar panels

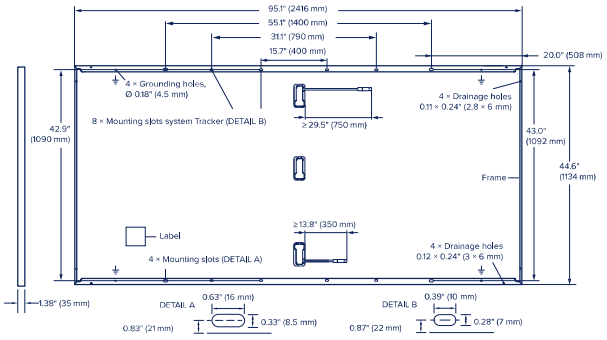
TÜVRheinland CERTIFIED Quality Controlled PV www.tuv.com ID 1111232615

EUPD RESEARCH TOP BRAND PV MODULES USA 2022

Q.PEAK DUO XL-G11 SERIES

Mechanical Specification

Format	95.1 in × 44.7 in × 1.38 in (including frame) (2416 mm × 1134 mm × 35 mm)
Weight	75.8 lbs (34.4 kg)
Front Cover	0.08 in (2 mm) thermally pre-stressed glass with anti-reflection technology
Back Cover	0.08 in (2 mm) semi-tempered glass
Frame	Anodised aluminium
Cell	6 × 26 monocrystalline Q.ANTUM solar half cells
Junction box	2.09-3.98 × 1.26-2.36 × 0.59-0.71 in (53-101 mm × 32-60 mm × 15-18 mm), Protection class IP67, with bypass diodes
Cable	4 mm² Solar cable; (+) ≥ 29.5 in (750 mm), (–) ≥ 13.8 in (350 mm)
Connector	Stäubli MC4-Evo2, Hanwha Q CELLS HQC4; IP68



Electrical Characteristics

POWER CLASS			570		575		580		585	
MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC[1] (POWER TOLERANCE +5 W / −0 W)				BSTC*		BSTC*		BSTC*		BSTC*
Minimum	Power at MPP[1]	P_{MPP} [W]	570	623.5	575	629.0	580	634.4	585	639.9
	Short Circuit Current[1]	I_{SC} [A]	13.50	14.77	13.52	14.80	13.55	14.83	13.57	14.86
	Open Circuit Voltage[1]	V_{OC} [V]	53.50	53.69	53.53	53.72	53.56	53.75	53.59	53.78
	Current at MPP	I_{MPP} [A]	12.83	14.03	12.87	14.09	12.92	14.14	12.97	14.19
	Voltage at MPP	V_{MPP} [V]	44.44	44.43	44.66	44.65	44.88	44.87	45.10	45.09
	Efficiency[1]	η [%]	≥ 20.8		≥ 21.0		≥ 21.2		≥ 21.4	

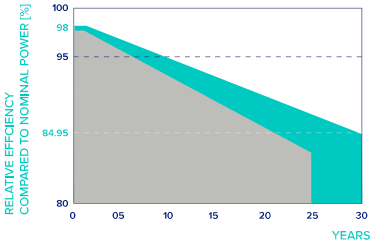
Bifaciality of P_{MPP} and I_{SC} 70 % ± 5 % • Bifaciality given for rear side irradiation on top of STC (front side) • According to IEC 60904-1-2

[1]Measurement tolerances P_{MPP} ± 3 %; I_{SC}, V_{OC} ± 5 % at STC: 1000 W/m²; *at BSTC: 1000 W/m² + φ × 135 W/m², φ = 70 % ± 5 %, 25 ± 2 °C, AM 1.5 according to IEC 60904-3

MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT[2]						
Minimum	Power at MPP	P_{MPP} [W]	429.1	432.9	436.6	440.4
	Short Circuit Current	I_{SC} [A]	10.87	10.89	10.91	10.93
	Open Circuit Voltage	V_{OC} [V]	50.60	50.63	50.66	50.68
	Current at MPP	I_{MPP} [A]	10.09	10.14	10.18	10.22
	Voltage at MPP	V_{MPP} [V]	42.51	42.71	42.89	43.08

[2]800 W/m², NMOT, spectrum AM 1.5

Qcells PERFORMANCE WARRANTY

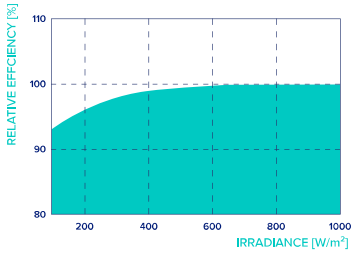


At least 98 % of nominal power during first year. Thereafter max. 0.45 % degradation per year. At least 93.95 % of nominal power up to 10 years. At least 84.95 % of nominal power up to 30 years.

All data within measurement tolerances. Full warranties in accordance with the warranty terms of the Qcells sales organisation of your respective country.

*Standard terms of guarantee for the 5 PV companies with the highest production capacity in 2021 (February 2021)

PERFORMANCE AT LOW IRRADIANCE



Typical module performance under low irradiance conditions in comparison to STC conditions (25 °C, 1000 W/m²).

TEMPERATURE COEFFICIENTS

Temperature Coefficient of I_{SC}	α	[%/K]	+0.04	Temperature Coefficient of V_{OC}	β	[%/K]	−0.27
Temperature Coefficient of P_{MPP}	γ	[%/K]	−0.34	Nominal Module Operating Temperature	NMOT	[°F]	109 ± 5.4 (43 ± 3 °C)

Properties for System Design

Maximum System Voltage	V_{SYS}	[V]	1500
Maximum Series Fuse Rating		[A DC]	25
Max. Design Load, Push / Pull[3]		[lbs / ft²]	75 (3600 Pa) / 33 (1600 Pa)
Max. Test Load, Push / Pull[3]		[lbs / ft²]	113 (5400 Pa) / 50 (2400 Pa)

[3] See Installation Manual

PV module classification	Class II
Fire Rating based on ANSI / UL 61730	TYPE 29[4]
Permitted Module Temperature on Continuous Duty	−40 °F up to +185 °F (−40 °C up to +85 °C)

[4] New Type is similar to Type 3 but with metallic frame

Qualifications and Certificates

UL 61730, CE-compliant,
IEC 61215:2016,
IEC 61730:2016,
U.S. Patent No. 9,893,215
(solar cells)

C SP US Certified UL 61730 · CE · TÜVRheinland CERTIFIED www.tuv.com ID 1111220277

Qcells pursues minimizing paper output in consideration of the global environment.

Note: Installation instructions must be followed. Contact our technical service for further information on approved installation of this product.

Hanwha Q CELLS America Inc. 400 Spectrum Center Drive, Suite 1400, Irvine, CA 92618, USA I TEL +1 949 748 59 96 I EMAIL hqc-inquiry@qcells.com I WEB www.qcells.com

qcells

ARRAY TECHNOLOGIES

FOLLOW THE SUN.
FOLLOW THE LEADER.

ENGINEERED SIMPLICITY

99.9%
UPTIME

7%
LOWER LCOE

31%
LOWER LIFETIME O&M

Array DuraTrack®

The most durable, reliable tracking system under the sun. While our single-bolt module clamp and forgiving tolerances streamline installation, and our flexibly linked architecture maximizes power density, it's our innovative use of fewer components and a failure-free wind management system that makes Array Technologies the best choice for solar trackers. **Better. Stronger. Smarter.**

Zero Scheduled Maintenance

Maintenance-free motors and gears, fewer moving parts, and industrial-grade components, means no scheduled maintenance required for our customers. While our competitors average two unscheduled maintenance events per day, we average only one per year.

High Power Density

Higher density means more power and more profit. DuraTrack offers the unique ability to maximize the power density of each site, boasting up to 120 modules per row and higher density than our closest competition.

Failure-free wind management

Nobody can control the weather, but DuraTrack self-manages wind events to power through even the harshest storms.

Fewer Components. Greater Reliability.

Array was founded on a philosophy of engineered simplicity. Minimizing potential failure points. With fewer components than competitors, DuraTrack consistently delivers higher reliability and superior uptime.

ARRAY TECHNOLOGIES

FOLLOW THE SUN. FOLLOW THE LEADER.

IEC PTL US CERTIFIED

COST VERSUS VALUE

Value is more than the cost of a tracking system. It's about building with forgiving tolerance and fewer parts so construction crews can work efficiently. It means protecting your investment with a failure-free wind management system. It also includes increasing power density. But most of all, value is measured in operational uptime, or reliability.

THE GLOBAL LEADER IN RELIABILITY

Maintenance-free motors and gears, fewer moving parts, and industrial-grade components, means no scheduled maintenance required for our customers. While our competitors average two unscheduled maintenance events per day, we average only one per year.

ARRAY TECHNOLOGIES, INC.

3901 Midway Place NE
Albuquerque, NM 87109 USA

+1 505.881.7567
+1 855.TRACKPV (872.2578)
+1.505.881.7572

sales@arraytechinc.com
arraytechinc.com

30+ GW YEARS OF OPERATION

NEARLY **200X** FEWER ELECTRICAL COMPONENTS PER 100MWAC THAN DECENTRALIZED TRACKERS

STRUCTURAL & MECHANICAL FEATURES/SPECIFICATIONS

Tracker Type	Horizontal single axis (1 module in portrait)
Ground Cover Ratio (GCR)	Site configurable. Typical: 28-45%
Linked Rows per Drive Motor	Up to 32
Drive Type	Rotating gear drive connected by drivelines (no driveline or bearing lubrication required)
Array Height	Torque Tube Elevation: 54" standard, adjustable (48" min height above grade)
Tracking Range of Motion	+/- 52°
Terrain Flexibility (N-S)	Up to 8.5° standard (up to 15° optional)
Terrain Flexibility (E-W)	Up to 25° combined angle
Wind Protection	Autonomous passive mechanical system No sensors or grid power required to activate
Max Wind Speed	140mph (225 km/h) per ASCE 7-10 (3-second gust), higher wind speeds possible depending on project conditions
Operating Temp Range	Standard: -4°F to 140°F (-20°C to 60°C) Optional: -40°F to 104°F (-40°C to 40°C)
Materials	Pre-galv steel, HDG steel and aluminum structural members, as required.
Codes and Standards	Certified to UL 3703 and IEC 62817

MODULE COMPATIBLITY

c-Si Modules per Row (1500V DC)	Typical: 84-112 Maximum: 120
First Solar Modules per Row (1500V DC)	Series 6 Plus: 84-108 Series 7: 96-114
Modules Supported	Most commercially available, including framed or frameless crystalline, thin film, bifacial, and back rails
Module Attachment	Single fastener, high-speed mounting clamps with integrated grounding. Traditional rails for crystalline in landscape, custom racking for thin film and frameless crystalline and bifacial per manufacturer specs.

CONTROL SYSTEM DETAILS

Baseline Solar Tracking Method	SANDIA's Ephemeris Model
Control Electronics	SmarTrack™ Controller Site Data Controller 6X Motor Controllers
Communications	MODBUS TCP
Backtracking	Yes (Optional terrain adaptive backtracking with SmarTrack)
Diffuse Light Response	Optional with SmarTrack
Night-time Stow	Yes (configurable)
Tracking Accuracy	+/- 2°
Motor Type	2HP, 3 Phase, 480V AC

INSTALLATION, OPERATION, AND MAINTENANCE

Annual Power Consumption (kWh per 1 MW)	Approximately 310 kWh per MW
PE Stamped Structural Calculations & Drawings	Yes
On-site Training and System Commissioning	Yes
Connection	100% bolted connections. No drilling, cutting or welding on-site or in-field fabrication
Scheduled Maintenance	None required
Module Cleaning Compatibility	Robotic, Tractor, Manual
Warranty	10 years structural; 5 years drive and controls components

Three-phase pad-mounted PEAK™ transformer

General

Eaton's Cooper Power™ series PEAK™ transformers represent the next generation of transformer design, and with three distinct product offerings there is a PEAK transformer to fit your needs. The first PEAK transformer option is a 75 °C average winding rise (AWR) design that offers users a potentially smaller and lighter footprint than today's 65 °C AWR transformers. This design is ideal for applications with cost, weight, or dimensional constraints. The second PEAK transformer option is a 65/75 °C AWR design that offers users sustained overload capacity while maintaining IEEE Std C57.91™-2011 standard per unit life requirements. This design offers customers flexibility in transformer sizing by offering the ability to accommodate future load growth without oversizing relative to current load, or the ability to meet periods of peak demand without oversizing based on continuous load. The third PEAK transformer option is a 55/75 °C AWR design that provides up to 22% additional loading capacity when compared to traditional mineral oil-filled transformers.

With all PEAK product offerings utilizing thermally upgraded kraft paper and Envirotemp™ FR3™ dielectric fluid, PEAK transformers offer customers a solution that is fully compatible with the new IEEE® standard for transformers using high-temperature insulation systems, IEEE Std C57.154™-2012 standard. In addition, all PEAK transformers provide the high fire point and environmental benefits of Envirotemp™ FR3™ fluid. PEAK transformers are available in various designs and configurations to match almost every application.

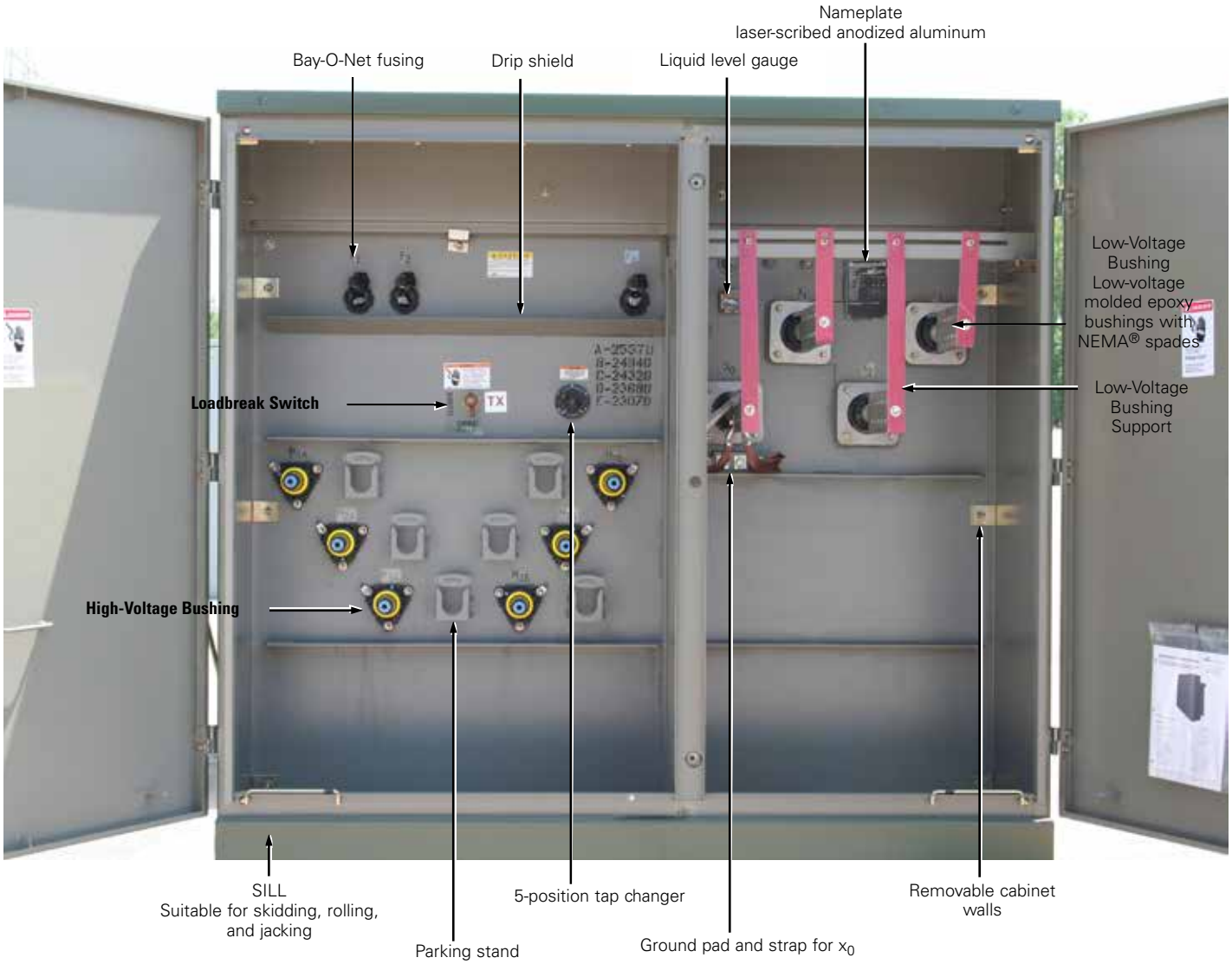


Figure 1. Three-phase pad-mounted PEAK transformer.

Table 1. Product scope

Type	Three-Phase, 50 or 60 Hz, 75 ºC Rise and 65 °C/75 °C and 55/75 °C
Fluid Type	Only Envirotemp™ FR3™ fluid
Coil Configuration	2-winding or 4-winding or 3-winding (Low-High-Low), 3-winding (Low-Low-High)
Size	45 – 10,000 kVA
Primary Voltage	2,400 – 46,000 V
Secondary Voltage	208Y/120 V to 14,400 V
Specialty Designs	Inverter/Rectifier Bridge
	K-Factor (up to K-19)
	Solar/Wind Designs
	Differential Protection
	Seismic Applications (including OSHPD)
	Hardened Data Center
	UL® Listed & Label and Classified

Table 2. Three-Phase Ratings

Three-Phase 50 or 60 Hz
kVA Available[1]: 45, 75, 112.5, 150, 225, 300, 500, 750, 1000, 1500, 2000, 2500, 3000, 3750, 5000, 7500, 10000

[1]Transformers are available in the standard ratings and configurations shown or can be customized to meet specific needs.

Table 3. Impedance Voltage

	Low-voltage rating		
Rating (kVA)	**≤ 600 V**	**2400 Δ through 4800 Δ**	**6900 Δ through 13800GY/7970 or 13800 Δ**
45-75	2.70-5.75	2.70-5.75	2.70-5.75
112.5-300	3.10-5.75	3.10-5.75	3.10-5.75
500	4.35-5.75	4.35-5.75	4.35-5.75
750-2500	5.75	5.75	5.75
3750	5.75	5.75	6.00
5000		6.00	6.50

Note: The standard tolerance is ± 7.5%

Table 4. Audible Sound Levels

	NEMA® TR-1 Average
Self-Cooled, Two Winding kVA Rating	**Decibels (dB)**
45-500	56
501-700	57
701-1000	58
1001-1500	60
1501-2000	61
2001-2500	62
2501-3000	63
3001-4000	64
4001-5000	65
5001-6000	66
6001-7500	67
7501-10000	68

Table 5. Insulation Test Levels

KV Class	Induced Test 180 or 400 Hz 7200 Cycle	kV BIL Distribution	Applied Test 60 Hz (kV)
1.2	Twice Rated Voltage	30	10
2.5		45	15
5		60	19
8.7		75	26
15		95	34
25		125	40
34.5		150	50

Table 6. Temperature Rise Ratings 0-3300 Feet (0-1000 meters)

	Unit Rating (Temperature Rise Winding)
	75, 65/75, 55/75 °C
Ambient Temperature Max.	40 °C
Ambient Temperature 24 Hour Average	30 °C
Temperature Rise Hotspot	90 °C

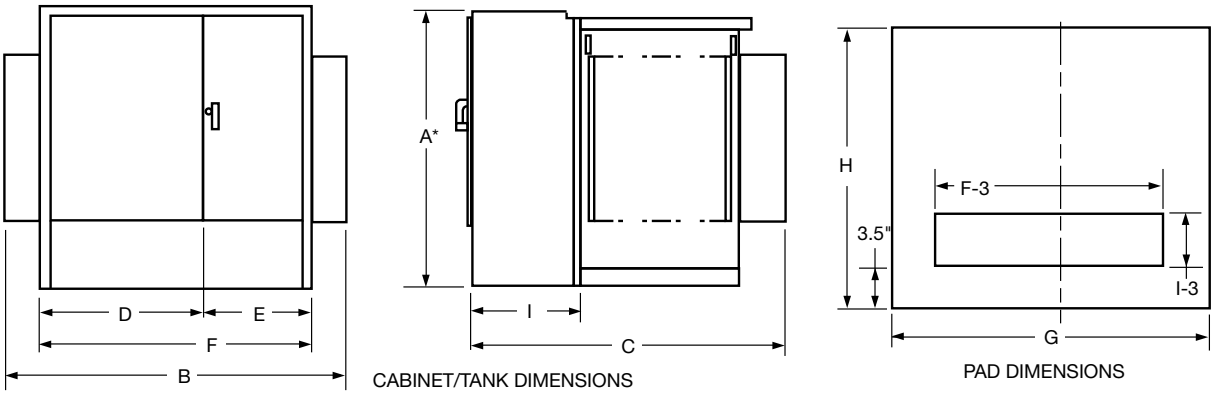


Figure 2. Transformer and pad dimensions.

* Add 9" for Bay-O-Net fusing.

Table 7. Fluid-Filled—Aluminum Windings 65 °C Rise[1]

kVA	A	B	C	D	E	F	G	H	I	GALLONS	WEIGHT
45	50	66	40	41	25	66	70	44	20	102	1990
75	50	66	40	41	25	66	70	44	20	102	1990
112.5	50	66	40	41	25	66	70	44	20	108	2150
150	50	66	41	41	25	66	70	45	20	115	2330
225	50	71	50	41	30	71	75	54	20	127	2810
300	50	71	50	41	30	71	75	54	20	136	3200
500	50	79	52	41	30	71	83	56	20	170	4200
750	64	82	56	41	30	71	86	60	20	242	5390
1000	64	82	59	41	30	71	86	63	20	305	7120
1500	64	76	90	42	29	71	80	94	24	356	9980
2000	72	76	90	42	29	71	80	94	24	520	11079
2500	72	79	97	42	29	71	83	101	24	550	13340
3000	84	88	98	49	29	78	92	102	24	625	14820
3750	84	88	103	49	29	78	92	107	24	671	17640
5000	84	99	108	50	30	80	103	112	24	910	21750
7500	94	100	108	48	48	96	104	112	24	1017	25100
10000	94	100	120	48	48	96	104	124	24	1500	38900

[1] Weights, gallons of fluid, and dimensions are for reference only and not for construction. Please contact an Eaton representative for exact dimensions.

* Add 9" for Bay-O-Net fusing.

Table 8. Fluid-Filled—Aluminum Windings 75 °C Rise[1]

kVA	A	B	C	D	E	F	G	H	I	GALLONS	WEIGHT
45	50	66	40	41	25	66	70	44	20	102	1990
75	50	66	40	41	25	66	70	44	20	102	1990
112.5	50	66	40	41	25	66	70	44	20	104	2150
150	50	66	40	41	25	66	70	44	20	106	2310
225	50	70	40	41	29	70	74	44	20	120	2710
300	50	70	50	41	29	70	74	54	20	132	3160
500	50	70	53	41	29	70	74	57	20	168	4090
750	64	70	57	41	29	70	74	61	20	237	5300
1000	64	70	58	41	29	70	74	62	20	284	6650
1500	64	71	64	42	29	71	75	68	24	347	9840
2000	64	71	68	42	29	71	75	72	24	393	10790
2500	64	71	91	42	29	71	75	95	24	406	13300
3000	72	71	108	42	29	71	75	112	24	559	14560
3750	72	78	102	46	32	78	82	106	24	634	17440
5000	84	85	112	47	38	85	89	116	24	755	20645
7500	84	88	120	48	40	88	92	124	24	890	23060
10000	84	88	130	48	40	88	92	134	24	990	27300

[1] Weights, gallons of fluid, and dimensions are for reference only and not for construction. Please contact an Eaton representative for exact dimensions.

* Add 9" for Bay-O-Net fusing.

Standard features

Connections and neutral configurations

- Delta-Wye: Low voltage neutral shall be a fully insulated X0 bushing with removable ground strap.
- Grounded Wye-Wye: High voltage neutral shall be internally tied to the low voltage neutral and brought out as the H0X0 bushing in the secondary compartment with a removable ground strap.
- Delta-Delta: Transformer shall be provided without a neutral bushing.
- Wye-Wye: High voltage neutral shall be brought out as the H0 bushing in the primary compartment and the low voltage neutral shall be brought as the X0 bushing in the secondary compartment.
- Wye-Delta: High voltage neutral shall be brought out as the H0 bushing in the primary compartment. No ground strap shall be provided (line to line rated fusing is required).

High and low voltage bushings

- 200 A bushing wells (15, 25, 35 kV)
- 200 A, 35 kV large Interface
- 600 A (15, 25, 35 kV) integral bushings (dead-front)
- Electrical-grade wet-process porcelain bushings (live-front)

Tank/cabinet features

- Bolted cover for tank access (45-2500 kVA)
- Welded cover with hand hole (>2500 kVA)
- Three-point latching door for security
- Removable sill for easy installation
- Lifting lugs (4)
- Stainless steel cabinet hinges and mounting studs
- Steel divider between HV and LV compartment
- 20″ deep cabinet (45-1000 kVA)
- 24″ deep cabinet (1500-7500 kVA)
- 30″ deep cabinet (34.5/19.92 kV)
- Pentahead captive bolt
- Stainless steel 1-hole ground pads (45-500 kVA)
- Stainless steel 2-hole ground pads (750-10,000 kVA)
- Parking stands (dead-front)

Valves/plugs

- One-inch upper filling plug
- One-inch drain plug (45-500 kVA)
- One-inch combination drain valve with sampling device in low voltage compartment (750-10,000 kVA)
- Automatic pressure relief valve

Nameplate

- Laser-scribed anodized aluminum nameplate

Figure 3. Drain valve with sampler.

Figure 4. Automatic pressure relief valve.

Figure 5. Liquid level gauge.

Figure 6. External Gauges.

Figure 7. External visible break with gauges.

Optional features

High and low voltage bushings

- 200 A (15, 25 kV) bushing inserts
- 200 A (15, 25 kV) feed thru inserts
- 200 A (15, 25 kV) (HTN) bushing wells with removable studs
- High-voltage 600 A (15, 25, 35 kV) deadbreak one-piece bushings
- Low-voltage 6-, 8-holes spade
- Low-voltage 12-, 16-, 20-holes spade (750-2500 kVA)
- Low-voltage bushing supports

Tank/cabinet features

- Stainless steel tank base and cabinet
- Stainless steel tank base, cabinet sides and sill
- 100% stainless steel unit
- Service entrance (2 inch) in sill or cabinet side
- Touch-up paint (domestic)
- Copper ground bus bar
- Kirk-Key provisions
- Nitrogen blanket
- Bus duct cutout

Special designs

- Triplex core
- High Altitude
- K-Factors
- Step-up
- Critical application
- Modulation transformers
- Seismic applications (including California Office of Statewide Health Planning and Development, OSHPD)

Switches

- 100 A, 150 A, 300 A tap-changers
- Dual-voltage switch
- One, two, or three On/Off loadbreak switches
- 4-position loadbreak V-blade switch or T-blade switch
- Delta-wye switch
- 3-position V-blade selector switch
- External visible break (15, 25, and 35 kV, up to 3 MVA)
- External visible break with gauges (15, 25, and 35 kV, up to 3 MVA)

Gauges and devices

- Liquid level gauge (optional contacts)
- Pressure vacuum gauge (optional contacts and bleeder)
- Dial-type thermometer (optional alarm contacts)
- Cover-mounted pressure relief device (optional alarm contacts)
- Ground connectors
- Hexhead captive bolt
- Molded case circuit breaker mounting provisions
- External gauges in padlockable box

Overcurrent protection

- Bay-O-Net fusing in series with a partial-range under-oil ELSP current-limiting fuse
- MagneX™ interrupter with ELSP current-limiting fuse
- Fuse/switch interlock

Valves/plugs

- Drain/sampling valve in high-voltage compartment
- Globe-type upper fill valve

Overvoltage protection

- Distribution-, intermediate-, or station-class surge arresters
- Elbow arresters (for dead-front connections)

Metering/fan/control

- Full metering package
- Metering socket
- NEMA® 4 control box (optional stainless steel)
- NEMA® 7 control box (explosion proof)
- Fan packages

Testing

- Customer test witness
- Customer final inspection
- Zero sequence impedance test
- Heat Run Test
- ANSI® Impulse Test
- Audible Sound Level Test
- RIV (Corona) Test
- Dissolved Gas Analysis (DGA) Test
- 8- or 24-Hour Leak Test

Coatings (Paint)

- ANSI® bell green
- ANSI® #61 light gray
- ANSI® #70 sky gray
- Special paint (available per request)

Nameplate

- Stainless steel nameplate

Decals and labels

- High-voltage warning signs
- Mr. Ouch decal
- Bi-lingual warning
- DOE compliant
- Customer stock code
- Customer stenciling
- Shock and arc flash warning decal
- Non-PCB decal

Construction

Core

The three-legged, step-lap mitered core construction is manufactured using a high-quality cutting machine. For maximum efficiency, cores are precisely stacked, virtually eliminating gaps in the corner joints.

Five-legged wound core or shell-type triplex designs are used for wye-wye connected transformers, and other special transformer designs.

Cores are manufactured with precision cut, burr-free, grain-oriented silicon steel. Many grades of core steel are available for optimizing core loss efficiency.

Coils

Pad-mounted transformers feature a rectangular coil configuration with wire-wound, high-voltage primaries and sheet-wound secondaries. The design minimizes axial stress developed by short circuits and provides for magnetic balancing of tap connections.

Coils are wound using the highest quality winding machines providing exacting tension control and conductor placement for superior short-circuit strength and maximum efficiency.

Extra mechanical strength is provided by diamond pattern, epoxy-coated paper insulation, used throughout the coil, with additional epoxy at heavy stress points. The diamond pattern distribution of the epoxy and carefully arranged ducts, provide a network of passages through which cooling fluid can freely circulate.

Coil assemblies are heat-cured under calculated hydraulic pressure to ensure performance against short-circuit forces.

Core and coil assemblies

Pad-mounted transformer core and coil assemblies are braced with heavy steel ends to prevent the rectangular coil from distorting under short-circuit conditions. Plates are clamped in place using presses, and welded or bolted to form a solid core and coil assembly. Core and coil assemblies exceed ANSI® and IEEE® requirements for short-circuit performance. Due to the rigidity of the design, impedance shift after short-circuit is comparable to that of circular wound assemblies.

Tanks

Transformer tanks are designed for high strength and ease of handling, installation, and maintenance. Tanks are welded using precision-cut, hot rolled, pickled and oiled steel. They are sealed to protect the insulating fluid and other internal components.

Transformer tanks are pressure-tested to withstand 7 psig without permanent distortion and 15 psig without rupture.

Tank finish

An advanced multi-stage finishing process exceeds the IEEE Std C57.12.28™-2014 standard. The eight-stage pre-treatment process assures coating adhesion and retards corrosion. It converts tank surfaces to a nonmetallic, water insoluble iron phosphate coating.

The paint method consists of two distinct layers of paint. The first is an epoxy primer (E-coat) layer which provides a barrier against moisture, salt and corrosives. The two-component urethane final coat seals and adds ultraviolet protection.

Vacuum processing

Transformers are dried and filled with filtered insulating fluid under vacuum, while secondary windings are energized. Coils are heated to drive out moisture, ensuring maximum penetration of fluid into the coil insulation system.

Insulating fluid

Eaton's Cooper Power series transformers are available with Envirotemp™ FR3™ fluid. The highly refined fluids are tested and degassed to assure a chemically inert product with minimal acid ions. Special additives minimize oxygen absorption and inhibit oxidation. To ensure high dielectric strength, the fluid is re-tested for dryness and dielectric strength, refiltered, heated, dried, and stored under vacuum before being added to the completed transformer.

Eaton's Cooper Power series transformers filled with Envirotemp™ FR3™ fluid enjoy unique fire safety, environmental, electrical, and chemical advantages, including insulation life extending properties.

A bio-based, sustainable, natural ester dielectric coolant, Envirotemp™ FR3™ fluid quickly and thoroughly biodegrades in the environment and is non-toxic per acute aquatic and oral toxicity tests.

Building for Environmental and Economic Sustainability (BEES) total life cycle assessment software, utilized by the US Dept. of Commerce, reports its overall environmental performance impact score at 1/4th that reported for mineral oil. Envirotemp™ FR3™ fluid has also earned the EPA Environmental Technology Verification of transformer materials.

With a fire point of 360 °C, Envirotemp™ FR3™ fluid is FM Approved® and Underwriters Laboratories (UL®) Classified "Less-Flammable" per NEC® Article 450-23, fitting the definition of a Listed Product per NEC®.

Special application transformers

Data center transformer

With focus rapidly shifting from simply maximizing uptime and supporting demand to improving energy utilization, the data center industry is continually looking for methods to increase its energy efficiency and reliability. Utilizing cutting edge technology, Eaton's Cooper Power series Envirotran™ Hardened Data Center (HDC) transformers are the solution. Designed with special attention given to surge protection, HDC liquid-filled transformers provide superior performance under the harshest electrical environments. Contrary to traditional dry-type units, HDC transformers provide unsurpassed reliability, overloadability, operational life, efficiency, thermal loading and installed footprint. These units have reliably served more than 100 MW of critical data center capacity for a total of more than 6,000,000 hours without an hour of downtime caused by a thermal or short-circuit coil failure.

The top priority in data center operations is uninterrupted service. Envirotran HDC transformers, having substantially higher levels of insulation, are less susceptible to voltage surges. Eaton has experienced zero failures due to switching transients. The ANSI® and IEEE® standard impulse withstand ratings are higher for liquid-filled transformers, making them less susceptible to insulation failure. The Envirotran HDC transformer provides ultimate protection by increasing the BIL rating one level higher than standard liquid-filled transformer ratings. The cooling system of liquid-filled transformers provides better protection from severe overloads—overloads that can lead to significant loss of life or failure.

Data center design typically includes multiple layers of redundancy, ensuring maximum uptime for the critical IT load. When best in class transformer manufacturing lead times are typically weeks, not days, an unexpected transformer failure will adversely affect the facility's reliability and profitability. Therefore, the ability to determine the electrical and mechanical health of a transformer can reduce the probability of costly, unplanned downtime. Routine diagnostic tests, including key fluid properties and dissolved gas analysis (DGA), can help determine the health of a liquid-filled transformer. Although sampling is not required for safe operation, it will provide the user with valuable information, leading to scheduled repair or replacement, and minimizing the duration and expense of an outage. With a dry-type transformer, there is no reliable way to measure the health or likelihood of an impending failure.

Solar transformer

As a result of the increasing number of states that are adopting aggressive Renewable & Alternative Energy Portfolio Standards, the solar energy market is growing—nearly doubling year over year. Eaton, a key innovator and supplier in this expanding market, is proud to offer Envirotran™ transformers specifically designed for Solar Photovoltaic medium-voltage applications. Eaton is working with top solar photovoltaic developers, integrators and inverter manufacturers to evolve the industry and change the way we distribute power.

In accordance with this progressive stance, every Eaton's Envirotran Solar transformer is filled with non-toxic, biodegradable Envirotemp™ FR3™ dielectric fluid, made from renewable seed oils. On top of its biodegradability, Envirotemp™ FR3™ fluid substantially extends the life of the transformer insulation, saving valuable resources. What better way to distribute green power than to use a green transformer. In fact, delaying conversion to Envirotran transformers places the burden of today's environmental issues onto tomorrow's generations. Eaton can help you create a customized transformer, based on site specific characteristics including: temperature profile, site altitude, solar profile and required system life. Some of the benefits gained from this custom rating include:

- Reduction in core losses
- Improved payback on investment
- Reduction in footprint
- Improved fire safety
- Reduced environmental impact

For the solar photovoltaic industry, Eaton offers standard step up transformers and dual secondary designs, including 4-winding, 3-winding (Low-High-Low) and 3-winding (Low-Low-High) designs.

Wind transformer

Eaton offers custom designs for renewable energy power generation. Eaton manufactures Cooper Power series Generator Step-Up (GSU) transformers for installation at the base of every wind turbine. Additionally, grounding transformers are available for wind power generation.

DOE efficiency

The United States Department of Energy (DOE) has mandated efficiency values for most liquid type, medium voltage transformers. As a result, all applicable Eaton's Cooper Power series transformers 2500 kVA and below conform to efficiency levels as specified in the DOE ruling "10 CFR Part 431 Energy Conservation Program".

K-Factor transformer

With a drastic increase in the use of ferromagnetic devices, arcing devices, and electric power converters, higher frequency loads have increased significantly. This harmonic loading has the potential to generate higher heat levels within a transformer's windings and leads by as much as 300%. Harmonic loading has the potential to induce premature failure in standard-design distribution transformers.

In addition to standard UL® "K-Factor" ratings, transformers can be designed to customer-provided specifications detailing precise loading scenarios. Onsite measurements of magnitude and frequency, alongside harmonic analysis of the connected load can be performed by Eaton engineers or a third party consultant. These field measurements are used to determine exact customer needs and outline the transformer specifications.

Eaton will design harmonic-resistant transformers that will be subjected to the unique harmonic loads. These units are designed to maintain normal temperature rise under harmonic, full-load conditions. Standard UL® "K-Factor" designs can result in unnecessary costs when the "next-highest" K-Factor must be selected for a calculated design factor. To save the customer these unnecessary costs, Eaton can design the transformer to the specific harmonic spectrum used in the application. K-factor transformers from Eaton are filled with mineral oil or Envirotemp™ FR3™ fluid and enjoy the added benefits of dielectric cooling such as higher efficiencies than dry-type transformers.

Modulation transformer

Bundled with an Outboard Modulation Unit (OMU) and a Control and Receiving Unit (CRU), a Modulation Transformer Unit (MTU) is designed to remotely achieve two way communication.

The use of an MTU reduces travel time and expense versus traditional meter reading performed by high voltage electricians. Additionally, with MTU it is possible to manage and evaluate energy consumption data, providing reduced metering costs and fewer tenant complaints.

An MTU utilizes existing utility infrastructure, therefore eliminating the need to engineer and construct a dedicated communication network.

Figure 8. Modular transformer.

Inverter/rectifier bridge

Eaton complements its range of applications for transformers by offering dual winding designs. These designs are intended for connection to 12-pulse rectifier bridges.

Product attributes

To set us apart from other transformer manufactures, Eaton includes the following guarantees with every three-phase pad-mounted transformer.

Engineered to order (ETO)

Providing the customer with a well developed, cost-effective solution is the number one priority at Eaton. Using customer specifications, Eaton works with the customer from the beginning to the end to develop a solution to fit their needs. Whether it is application specific, site specific, or a uniquely specified unit, Eaton provides transformers with the best in class value and performance, saving the customer time and money.

Made in the U.S.A.

Eaton manufactures three-phase pad-mounted transformers right here in the United States of America. Our manufacturing facilities are positioned strategically for rapid shipment of products. Furthermore, should the need arise, Eaton has a broad network of authorized service repair shops throughout the United States.

Superior paint performance

Protecting transformers from nature's elements worldwide, Eaton's E-coat system provides unrivaled transformer paint life, and exceeds IEEE Std C57.12.28™-2014 and IEEE C57.12.29™-2005 standards. In addition to the outside of the unit, each transformer receives a gray E-coat covering in the interior of the tank and cabinet, providing superior rust resistance and greater visibility during service.

If the wide range of standard paint selections does not suit the customer's needs, Eaton will customize the paint color to meet their requirements.

Rectangular coil design

Eaton utilizes a rectangular coil design. This winding technique results in a smaller overall unit footprint as well as reducing the transformer weight. The smaller unit size does not hinder the transformer performance in the least. Units have proven short circuit withstand capabilities up to 10 MVA.

Testing

Eaton performs routing testing on each transformer manufactured including the following tests:

- **Insulation Power Factor:** This test verifies that vacuum processing has thoroughly dried the insulation system to required limits.
- **Ratio, Polarity, and Phase Relation:** Assures correct winding ratios and tap voltages; checks insulation of HV and LV circuits. Checks entire insulation system to verify all live-to-ground clearances.
- **Resistance:** This test verifies the integrity of internal high-voltage and low-voltage connections; provides data for loss upgrade calculations.
- **Routine Impulse Tests:** The most severe test, simulating a lightning surge. Applies one reduced wave and one full wave to verify the BIL rating.
- **Applied Potential:** Applied to both high-voltage and low-voltage windings, this test stresses the entire insulation system to verify all live-to-ground clearances.
- **Induced Potential:** 3.46 times normal plus 1000 volts for reduced neutral designs.
- **Loss Test:** These design verification tests are conducted to assure that guaranteed loss values are met and that test values are within design tolerances. Tests include no-load loss and excitation current along with impedance voltage and load loss.
- **Leak Test:** Pressurizing the tank to 7 psig assures a complete seal, with no weld or gasket leaks, to eliminate the possibility of moisture infiltration or fluid oxidation.

Design performance tests

The design performance tests include the following:

- **Temperature Rise:** Our automated heat run facility ensures that any design changes meet ANSI® and IEEE® temperature rise criteria.
- **Audible Sound Level:** Ensures compliance with NEMA® requirements.
- **Lightning Impulse:** To assure superior dielectric performance, this test consists of one reduced wave, two chopped waves and one full wave in sequence, precisely simulating the harshest conditions.

Thomas A Edison Research and Test Facility

We are constantly striving to introduce new innovations to the transformer industry, bringing you the highest quality transformer for the lowest cost. Eaton's Cooper Power series Transformer Products are ISO 9001 compliant, emphasizing process improvement in all phases of design, manufacture, and testing. We have invested millions of dollars in the Thomas A. Edison Technical Center, our premier research facility in Franksville, Wisconsin affirming our dedication to introducing new innovations and technologies to the transformer industry. This research facility is fully available for use by our customers to utilize our advanced electrical and chemical testing labs.

GREENSPARK SOLAR

10/16/2023

Town of Henrietta
475 Calkins Road
Rochester, NY 14623

To Whom It May Concern,

Please allow this letter to authorize Fisher Associates, P.E., L.S., L.A., D.P.C., to discuss and represent Lehigh South Solar 1 LLC/Sustainable Energy Developments, Inc. DBA GreenSpark Solar, with regards to the Lehigh South Solar 1 Project. They have my authorization to interact with the Town Board and the Planning Board on my behalf regarding the materials submitted in support of our Special Use Permit and Site Plan Review applications.

Kind Regards,

Kevin Schulte
CEO, GreenSpark Solar

October 16, 2023

Steve Schultz, Town of Henrietta Supervisor
Town of Henrietta Town Board
475 Calkins Road
Rochester, NY 14623

Dear Mr. Schultz and Members of the Town Board,

Lehrwood Estates LLC is the landowner of tax parcel 189.02-1-5 within the Town of Henrietta, the project site for the Lehigh South 1 and Lehigh South 2 solar array projects proposed by GreenSpark Solar / EH Henrietta Solar 1 LLC and EH Henrietta Solar 2 LLC, (collectively, the Project Companies).

In July 2023 Lehrwood Estates LLC signed a Letter of Intent to enter into a land lease agreement with GreenSpark Solar to facilitate the construction and operation of the proposed solar arrays. That lease is presently in development and execution is anticipated in parallel with the permitting of the proposed projects. In support of these projects, and as a component of the Project Companies' Incentive Zoning Application associated with these projects, in satisfaction of §295-34.12 of the Town's Incentive Zoning code Lehrwood Estates LLC has committed to the provision of one of the public amenities detailed in the matrix below at the Town's option. The specific details will be coordinated with the Town of Henrietta to ensure that the public amenity is delivered in accordance with the Town standards and requirements:

Option	Amenity	Amenity Category	Description	Approx. Value
2	Donate area at the northeast corner of tax parcel 189.02-1-5 to Town of Henrietta	§295-34.12C(2)	Lehrwood Estates LLC would deed 4-5 acres to the Town of Henrietta to develop trailhead and parking area at Lehigh Valley Trail connection	$100,000
3	Develop walking trails and convey public access easement across portion of tax parcel 189.02-1-5	§295-34.12C(4)	Lehrwood Estates would develop nature walking trails, and enhance the area with pollinator species, pond access and gardens, and convey a public access easement cross a portion of tax parcel 189.02-1-5, west of the Lehigh Valley Trail, to improve pedestrian connectivity to the trail and provide additional open space amenities to the public.	$75,000 - $100,000

Lehrwood Estates LLC looks forward to working with the Project Companies and the Town of Henrietta to advance these projects and public amenities.

Sincerely,

BE Howlett

Bruce Howlett
Manager, Lehrwood Estates LLC
President, Howlett Farms

October 16, 2023

Steve Schultz, Town of Henrietta Supervisor
Town of Henrietta Town Board
475 Calkins Road
Rochester, NY 14623

Dear Mr Schultz and Members of the Town Board,

Lehrwood Estates LLC is the landowner of tax parcel 189.02-1-5 within the Town of Henrietta, the project site for the Lehigh South 1 and Lehigh South 2 solar array projects proposed by GreenSpark Solar / EH Henrietta Solar 1 LLC and EH Henrietta Solar 2 LLC, (collectively, the Project Companies)

In July 2023 Lehrwood Estates LLC signed a Letter of Intent to enter into a land lease agreement with GreenSpark Solar to facilitate the construction and operation of the proposed solar arrays. That lease is presently in development and execution is anticipated in parallel with the permitting of the proposed projects. In support of these projects, and as a component of the Project Companies' Incentive Zoning Application associated with these projects, in satisfaction of §295-34 12 of the Town's Incentive Zoning code Lehrwood Estates LLC has committed to the provision of one of the public amenities detailed in the matrix below at the Town's option The specific details will be coordinated with the Town of Henrietta to ensure that the public amenity is delivered in accordance with the Town standards and requirements.

Option	Amenity	Amenity Category	Description	Approx. Value
2	Donate area at the northeast corner of tax parcel 189.02-1-5 to Town of Henrietta	§295-34.12C(2)	Lehrwood Estates LLC would deed 4-5 acres to the Town of Henrietta to develop trailhead and parking area at Lehigh Valley Trail connection	$100,000
3	Develop walking trails and convey public access easement across portion of tax parcel 189.02-1-5	§295-34.12C(4)	Lehrwood Estates would develop nature walking trails, and enhance the area with pollinator species, pond access and gardens, and convey a public access easement cross a portion of tax parcel 189.02-1-5, west of the Lehigh Valley Trail, to improve pedestrian connectivity to the trail and provide additional open space amenities to the public	$75,000 - $100,000

Lehrwood Estates LLC looks forward to working with the Project Companies and the Town of Henrietta to advance these projects and public amenities.

Sincerely,

Bruce E Howlett (Oct 16, 2023 11:41 EDT)

Bruce Howlett
Manager, Lehrwood Estates LLC
President, Howlett Farms

October 3, 2023

Steve Schultz, Town of Henrietta Supervisor
Town of Henrietta Town Board
475 Calkins Road
Rochester, NY 14623

Dear Mr. Schultz and Members of the Town Board,

I, the landowner of Tax Parcel 189.02-1-5, am writing to confirm that I authorize EH Henrietta Solar 1 LLC to pursue all permits required by the town of Henrietta in order to complete the Lehigh South Solar 1 Project.

I certify that I am the owner of the property for which the permits are requested (Tax Parcel 189.02-1-5).

As of 7/6/23, I have entered into a letter of intent agreement with GreenSpark Solar detailing my intent to enter into a Land Lease Agreement for the installation of a Photovoltaic generating system. Please find it attached to this letter.

We look forward to working with EH Henrietta Solar 1 LLC, GreenSpark Solar and the Town of Henrietta in support of this project.

Sincerely,
Bruce Howlett

Bruce E Howlett (Oct 5, 2023 12:58 EDT)

APPENDIX H

New York State Standardized Acknowledgment of Property Owner Consent Form

Interconnecting Utility: RG&E
Utility Project Number (if available): N/A

(Note: This Acknowledgment is to be signed by the owner of the property where the proposed distributed generation facility and interconnection will be placed, when the owner or operator of the proposed distributed generation facility is not also the owner of the property, and the property owner's electric facilities will not be involved in the interconnection of the distributed generation facility.)

This Acknowledgment is executed by Lehrwood Estates LLC, (the "Property Owner"; as used herein the term shall include the Property Owner's successors in interest to the Property), as owner of the real property situated in the City/Town of Henrietta, Monroe County, New York, known as East Henrietta Road (S/B/L 189.02-1-5) [street address] (the "Property"), at the request of Sustainable Energy Developments, Inc. d/b/a GreenSpark Solar [name of Developer] (the "Developer"; as used herein the term shall include the Developer's successors and assigns).

This Acknowledgment does not grant or convey any interest in the Property to the Developer.

1. The Property Owner certifies as of the date indicated below that the Property Owner is working exclusively with the Developer on a proposal to install a distributed generation facility (the "Facility") on the Property.

   OR

2. The Property Owner certifies as of the date indicated below that the Developer has executed with the Property Owner one of the following: a signed option agreement to lease or purchase the Property, an executed Property lease, or an executed purchase agreement for the Property granting the Developer a right to use the Property for purposes of installing the Facility.

Property Owner:	Developer:
By: Bruce E Howlett	By:
Name: Bruce E Howlett	Name:
Title: S/E Owner	Title:
Date: 7/6/2023	Date:

APPENDIX H terminates along with the "LETTER OF Intent for LAND Lease Agreement" BEH 7/6/2023

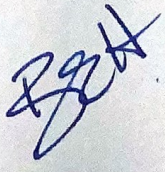
LETTER OF INTENT FOR LAND LEASE AGREEMENT

This LETTER OF INTENT ("Letter") is entered into between Lehrwood Estates LLC ("Land Owner") with property located at East Henrietta Road (Parcel #189.02-1-5) in the Town of Henrietta, and Sustainable Energy Developments, Inc., d/b/a GreenSpark Solar ("Tenant") located at 318 Timothy Road, Ontario, NY, referred to collectively as the "Parties".

The Letter sets forth the Parties' intentions to negotiate a Land Lease Agreement (the "Agreement") for the installation a one or two Photovoltaic (PV) generating systems (the "System") on the Land Owner's Premises (as defined below) and their intention to negotiate the Agreement in good faith commencing with the full execution of this letter.

1. Premises. Tenant desires to lease land from Land Owner land that is described in Exhibit 'A' attached hereto ('the Premises'). Land Owner acknowledges and agrees that the exact size, shape and location of the property that will comprise the Premises has not been determined, and any maps or depictions which Tenant has shown or will show including are approximations only and subject to mutually agreed upon change. The parties agree that prior to execution of a final contract, Tenant shall provide to Land Owner an instrument survey, showing the exact dimensions of the property to be utilized by Tenant. The parties further agree that the area utilized by Tenant shall not be less than forty (40) acres.

2. Term. The Term of the Agreement (the "Term") shall be Twenty-five years commencing on the date on which project begins substantial construction defined as civil construction mobilization (the "Term Commencement Date") or within 180 days of receipt of final site plan approval for each project, or within one (1) year following execution of the final contract, whichever occurs first. In no event shall the Term Commencement Date extend beyond one (1) year from the expiration of any option term defined below. At the end of the Term, the Tenant will have an Option to extend the term pursuant to the Parties reaching mutually agreeable terms in writing.



3. Option Term: Tenant may purchase from Land Owner annual option terms, following execution of a final contract, based upon the following schedule.

1. $5,000 upon execution of the first option.

2. $3,000 for first year of option.

3. $6,000 for second year of option.

4. $8,000 for third year of option.

5. $10,000 for fourth year of option.

4. A. Rent. The "Rent Commencement Date" shall begin on the Term Commencement Date as defined above. Within 30 days of the Rent Commencement Date, Tenant shall pay the Owner an initial rent payment of $2000 per acre, utilized by Tenant in any manner, with acreage to be not less than forty (40) acres per year for the first year's rent. The exact rent payment and acreage to be leased to be determined as stated above. Tenant shall then pay Owner "Annual Rent" each year beginning on the Rent Commencement date anniversary, escalating at 2.0%per annum.

B. Taxes. Tenant will negotiate with the taxing authorities for a Payment in Lieu of Taxes ("PILOT") agreement, which covers taxation of the solar equipment installed onsite. Tenant shall be responsible for payment of any taxes.

5. Purpose. As part of the Agreement, Tenant shall be granted the right to use the Premises for the purpose of construction, installing, removing, replacing, reconstructing, maintaining and operating a solar array project including solar panels, equipment, equipment shelters and buildings, electronics equipment generators and other equipment improvements. Further rights and responsibilities of the Parties shall be defined in the Agreement.

6. Entry. Land Owner consents and agrees that upon execution of final contract, Tenant, its employees, agents and independent contractors ("Authorized Parties") may enter upon the Property to

conduct and perform some or all of the following activities ("Permitted Activities"): surveys, Phase 1 environmental audits, and boundary surveys,. Tenant agrees to be responsible for any and all costs related to the Permitted Activities, including installation on and operation and removal of equipment on the Property, repair and restoration of any damage to the Premises caused by the Permitted Activities, and indemnification against any claims arising by reason of the Permitted activities, including attorney fees expended in connection therewith.

7. Filings. Land Owner consents and agrees that the Authorized Parities may make an file applications on Land Owner's behalf to such local, state and federal governmental entities whose approval Tenant may consider necessary or advisable to have the Property approved as a photovoltaic generating system, including, but not limited to, governmental approvals for zoning variances, rezoning applications, building permits and wetland permits. Land Owner hereby agrees that a copy of this Agreement is as effective as the original. However, if requested by the Authorized Parities, Land Owner agrees to execute such other and further documents as may be required by the governmental entity in question, to evidence Land Owner's consent to the action which is proposed to be taken.

8. Construction Liens. The parties agree that the final contract shall include a provision that Tenant shall not permit any liens arising out of Tenant's use of Land Owner Property under this Agreement to be filed against the Land Owner's Property. Tenant shall, within sixty (60) days after it receives notice of the lien, provided a bond of other security that Land Owner may reasonably request, or remove such lien from the Land Owner's Property in the manner provided by applicable law.

9. Confidentiality. Each Party shall treat as confidential and proprietary all information and data delivered to it by the other Party ("Confidential Information"). Confidential information shall not be disclosed to any third party, other than to either Party's subcontractors or sub consultants under similar nondisclosure agreements, during or subsequent to the term of this Agreement. Nothing contained herein shall preclude either Party from disclosing information or date: (i) in the public domain without breach of this Agreement; (ii) developed independently by either Party; or (iii) where disclosure or submission to

conduct and perform some or all of the following activities ("Permitted Activities"): surveys, Phase 1 environmental audits, and boundary surveys,. Tenant agrees to be responsible for any and all costs related to the Permitted Activities, including installation on and operation and removal of equipment on the Property, repair and restoration of any damage to the Premises caused by the Permitted Activities, and indemnification against any claims arising by reason of the Permitted activities, including attorney fees expended in connection therewith.

7. Filings. Land Owner consents and agrees that the Authorized Parities may make an file applications on Land Owner's behalf to such local, state and federal governmental entities whose approval Tenant may consider necessary or advisable to have the Property approved as a photovoltaic generating system, including, but not limited to, governmental approvals for zoning variances, rezoning applications, building permits and wetland permits. Land Owner hereby agrees that a copy of this Agreement is as effective as the original. However, if requested by the Authorized Parities, Land Owner agrees to execute such other and further documents as may be required by the governmental entity in question, to evidence Land Owner's consent to the action which is proposed to be taken.

8. Construction Liens. The parties agree that the final contract shall include a provision that Tenant shall not permit any liens arising out of Tenant's use of Land Owner Property under this Agreement to be filed against the Land Owner's Property. Tenant shall, within sixty (60) days after it receives notice of the lien, provided a bond of other security that Land Owner may reasonably request, or remove such lien from the Land Owner's Property in the manner provided by applicable law.

9. Confidentiality. Each Party shall treat as confidential and proprietary all information and data delivered to it by the other Party ("Confidential Information"). Confidential information shall not be disclosed to any third party, other than to either Party's subcontractors or sub consultants under similar nondisclosure agreements, during or subsequent to the term of this Agreement. Nothing contained herein shall preclude either Party from disclosing information or date: (i) in the public domain without breach of this Agreement; (ii) developed independently by either Party; or (iii) where disclosure or submission to

any governmental authority is required by applicable statues, ordinances, codes, regulations, consent decrees, orders, judgments, rules, and all other requirements of any and all governmental or judicial entities that have jurisdiction, but only after written notice has been received by the receiving Party.

10. Governing Law, Integration, Amendments. This Letter shall be governed by the substantive laws of the State of New York without regard to conflict of law principles. This Letter constitutes the entire understanding and agreement between the Parties hereto and their affiliates with respect to its subject matter and supersedes all prior or contemporaneous agreements, representations, warranties and understandings of such Parties (whether oral or written). No promise, inducement, representation or agreement, other than as expressly set forth herein, has been made to or by the Parties hereto. This Letter may be amended only by a written agreement that is signed by the Parties. Evidence shall be inadmissible to show agreement by and between the Parties hereto to any term or condition contrary or in addition to the terms and conditions contained in this Letter. This Letter shall be construed according to its fair meaning and not strictly for or against either Party.

11. Counterparts. The Letter may be executed in multiple counterparts, each of which shall serve as an original for all purposes, but all copies shall constitute but one and the same agreement, binding on all parties hereto, whether or not each counterpart is excited by all parties hereto, so long as each party hereto has executed one or more counterparts hereof. The exchange of a fully executed Letter by electronic delivery in .pdf format will be sufficient to agreement by the Parties to the terms of conditions of this Agreement.

12. Except for 9, 10 and 11, THIS LETTER DOES NOT CONSITUTE OR CREATE, AND SHALL NOT BE DEEMED TO CONSITUTUTE OR CREATE, ANY LEGALLY BINDING OR ENFOURCABLE OBLIGATION TO COMPLETE THE TRANSACTION ON THE PART OF EITHER OF THE PARITIES. The Binding Provisions shall terminate and be of no further force or effect upon the earlier to occur of (a) one hundred and eighty (180) days after the date that both parties have executed this Agreement, or (b) the termination of this letter agreement by mutual agreement of the Parties in writing

(such earliest to occur date, the "Termination Date"). Upon termination of the Binding Provisions on the Termination Date, the Parities will have no further obligation or liability under this Letter.

The rest of the page is intentionally omitted.

IN WITNESS WHEREOF, the parities have executed this LOI as of the date fully executed below.

Lehrwood Estates LLC,	Sustainable Energy Development, Inc.,
Land Owner	d/b/a Green Spark Solar
Name: Bruce E Howlett	Kevin Schulte
Title: Land Owner Sole Owner	Title: CEO
Date: 7/6/2023	Date:

WITNESS

Ashley Stan
Controller

7/6/23 Date

October 16, 2023

Steve Schultz, Town of Henrietta Supervisor
Town of Henrietta Town Board
475 Calkins Road
Rochester, NY 14623

Dear Mr. Schultz and Members of the Town Board,

I've been in communication with GreenSpark Solar / EH Henrietta Solar 1 LLC and EH Henrietta Solar 2 LLC (the Project Companies) regarding their proposed ground-mounted photovoltaic solar array projects to be located off of Middle Road in the Town of Henrietta [Tax Parcel 189.02-1-5]. The TTMH Henrietta Holdings LLC is the owner of the property immediately adjacent to the project site, to the West [Tax Parcel 189.02-1-1.1].

It is our understanding that the solar projects will require access via an easement through our property from Middle Road. As part of this project,

- GreenSpark Solar and the project companies have expressed their commitment to contribute financially to the construction of a permanent access road within the easement that will provide public access to the Lehigh Valley Trail.
- GreenSpark Solar and the project companies will explore the potential for the Masonic Care Community project to be an off taker of the electricity credits from the project.

As part of the Masonic Care Community Senior Housing project, TTMH Henrietta Holdings LLC will commit to working in good faith with GreenSpark Solar and the project companies, as well as the Town of Henrietta to formalize the details of the access easement and incorporating the proposed public access to the Lehigh Valley Trail.

We look forward to working with the Project Companies and the Town of Henrietta in support of these projects.

Sincerely,

G. Michael Morris

G. Michael Morris
President
TTMH Henrietta Holdings LLC
2150 Bleecker St
Utica, NY 13501
[redacted]

Gmail **Brooke Mayer <**[redacted]

NY-Sun / Ag NOI threshold

Rossi, Candace J (NYSERDA) [redacted] Tue, Oct 3, 2023 at 1:20 PM
To: Brooke Mayer <[redacted]
Cc: Matt Vanderbrook [redacted]com>, Mia Morgillo <[redacted]

Hi Brooke, an NOI is only required when it is located in a State Certified Agricultural District. If it is not located in such an area, than no NOI is required.

Thanks,

Candace Rossi, CEM
Senior Project Manager, NY-Sun

From: Brooke Mayer [redacted]
Sent: Tuesday, October 3, 2023 1:16 PM
To: Rossi, Candace J (NYSERDA) <[redacted]
Cc: Matt Vanderbrook <[redacted]rgillo <m[redacted]
Subject: NY-Sun / Ag NOI threshold

ATTENTION: This email came from an external source. Do not open attachments or click on links from unknown senders or unexpected emails.

Hello Candace,

I hope that all is well! We are presently navigating the Town of Henrietta solar code which, pursuant to § 295-73D(4), requires that *"a notice of intent (NOI) must be filed with the New York State Department of Agriculture and Markets (NYSDAM). The NOI process must be completed and approved by NYSDAM prior to site plan approval."*

The parcel that we're proposing to develop an array on is not located within a county Agricultural District, nor does it currently host any active farm operations. Accordingly, our interpretation is that this project is not subject to the Ag NOI review process pursuant to Section 305 of the Agricultural Districts Law. The Town recommended that we reach out to the State to confirm this understanding. Could you please either confirm or refer me to your counterpoint at NYSDAM for clarification on this point?

Many thanks!

Brooke

Brooke Mayer | Commercial Solar Developer | she/her
GreenSpark Solar | A Certified B Corp

O: 585.265.2384 | [redacted] | greensparksolar.com

318 Timothy Lane

Ontario, NY 14519

GREENSPARK

Loyal to People. Loyal to Planet.

We create fiercely local, cost-effective, clean energy options.

New York State
Parks, Recreation and
Historic Preservation

KATHY HOCHUL
Governor

ERIK KULLESEID
Commissioner

October 10, 2023

Mia Morgillo
318 Timothy Ln
Ontario, NY 14519

Re: SEQRA
EH Henrietta Solar 1 & 2/6.875 MW/34.56 Acres
East Henrietta Rd, Henrietta, NY 14467
23PR08340

Dear Mia Morgillo:

Thank you for requesting the comments of the Office of Parks, Recreation and Historic Preservation (OPRHP). We have reviewed the project in accordance with the New York State Historic Preservation Act of 1980 (Section 14.09 of the New York Parks, Recreation and Historic Preservation Law). These comments are those of the OPRHP and relate only to Historic/Cultural resources. They do not include potential environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8) and its implementing regulations (6 NYCRR Part 617).

Based upon this review, it is the opinion of OPRHP that no properties, including archaeological and/or historic resources, listed in or eligible for the New York State and National Registers of Historic Places will be impacted by this project.

If further correspondence is required regarding this project, please be sure to refer to the OPRHP Project Review (PR) number noted above.

Sincerely,

R. Daniel Mackay

Deputy Commissioner for Historic Preservation
Division for Historic Preservation

rev: V. Bartos