

Section B: Community Solar Energy Project Description

Instructions: Section B must be completed in its entirety. Any attachments should be placed at the end of the Application package.

I. Applicant Contact Information

Applicant Company/Entity Name: Vanguard Energy Partners, LLC
 First Name: Shannon Last Name: Donnelly
 Daytime Phone: 908 534 1302 Email: sdonnelly@vepenergy.com
 Applicant Mailing Address: 2 Commerce Street
 Municipality: Branchburg County: Somerset Zip Code: 08876

Applicant is: Community Solar Project Owner Community Solar Developer/Facility Installer
 Property/Site Owner Subscriber Organization
 Agent (if agent, what role is represented) _____

II. Community Solar Project Owner

Project Owner Company/Entity Name (*complete if known*): NJR Clean Energy Ventures, Corporation
 First Name: Garrett Last Name: Lerner
 Daytime Phone: 732-919-8106 Email: glerner@njresources.com
 Mailing Address: 1415 Wyckoff Road
 Municipality: Wall Township County: Monmouth Zip Code: 07719

III. Community Solar Developer

This section, "Community Solar Developer," is optional if: 1) the Applicant is a government entity (municipal, county, or state), AND 2) the community solar developer will be selected by the Applicant via a RFP, RFQ, or other bidding process. In all other cases, this section is required.

Developer Company Name (*optional, complete if applicable*): Vanguard Energy Partners, LLC
 First Name: Shannon Last Name: Donnelly
 Daytime Phone: 908 534 1302 Email: sdonnelly@vepenergy.com
 Mailing Address: 2 Commerce Street
 Municipality: Branchburg County: Somerset Zip Code: 08876

The proposed community solar project will be primarily built by:
 the Developer a contracted engineering, procurement and construction ("EPC") company

If the proposed community solar project will be primarily built by a contracted EPC company, complete the following (optional, complete if known):

If the EPC company information is left blank and the proposed project is approved by the Board for participation in the Community Solar Energy Pilot Program, the Applicant must inform the Board of the information below once the EPC company becomes known.

EPC Company Name (optional, complete if applicable): Vanguard Energy Partners, LLC
 First Name: Shannon Last Name: Donnelly
 Daytime Phone: 908-534-1302 Email: sdonnelly@vepenergy.com
 Mailing Address: 2 Commerce Street
 Municipality: Branchburg County: Somerset Zip Code: 08876

IV. Property/Site Owner Information

Property Owner Company/Entity Name: Pattenburg Quarry Industries, LLC
 First Name: Antonio Last Name: Ferriera
 Daytime Phone: 908 616 0655 Email: aferriera@ferrieragroup.com
 Applicant Mailing Address: 31 Tannery Road
 Municipality: Branchburg County: Somerset Zip Code: 08876

V. Community Solar Subscriber Organization (optional, complete if known)

If this section, "Community Solar Subscriber Organization," is left blank and the proposed project is approved by the Board for participation in the Community Solar Energy Pilot Program, the Applicant must inform the Board of the information below once the Subscriber Organization becomes known.

Subscriber Organization Company/Entity Name (optional, complete if applicable): NJR Clean Energy Ventures, Corporation
 First Name: Garrett Last Name: Lerner
 Daytime Phone: 732-919-8106 Email: glerner@njresources.com
 Mailing Address: 1415 Wyckoff Road
 Municipality: Wall Township County: Monmouth Zip Code: 07719

VI. Proposed Community Solar Facility Characteristics

Community Solar Facility Size (as denominated on the PV panels):
3.88 MW AC 4.99 MW DC

Community Solar Facility Location (Address): 455 Route 614
 Municipality: Bethlehem & Union Township County: Hunterdon Zip Code: 08802
 Name of Property (optional, complete if applicable): Pattenburg Quarry Industries, LLC
 Property Block and Lot Number(s): Block 12, Lot 4; Block 12, Lot 5; Block 1.08, Lot 22



Community Solar Site Coordinates: 40.643993 N Longitude 75.016091 W Latitude

Total Acreage of Property Block and Lots: 58.94 acres

Total Acreage of Community Solar Facility: 10.2 acres

Attach a delineated map of the portion of the property on which the community solar facility will be located. In the electronic submission, two copies of the delineated map should be provided: 1) as a PDF document, and 2) as a design plan in drawing file format (.dwg) or as a shapefile (.shp), in order to facilitate integration with Geographic Information System (GIS) software.

EDC electric service territory in which the proposed community solar facility is located: *(select one)*

- Atlantic City Electric
- Jersey Central Power & Light
- Public Service Electric & Gas
- Rockland Electric Co.

Estimated date of project completion* *(The Applicant should provide a good faith estimate of the date of project completion; however, this data is being collected for informational purposes only.):* July
(month) 2020 (year)

Project completion is defined pursuant to the definition at N.J.A.C. 14:8-9.3 as being fully operational, up to and including having subscribers receive bill credits for their subscription to the project.

The proposed community solar facility is an existing project* Yes No

If "Yes," the Application will not be considered by the Board. See section B. XIII. for special provisions for projects having received a subsection (t) conditional certification from the Board prior to February 19, 2019.

*Existing project is defined in N.J.A.C. 14:8-9.2 as a solar project having begun operation and/or been approved by the Board for connection to the distribution system prior to February 19, 2019.

VII. Community Solar Facility Siting

1. The proposed community solar project has site control* Yes No

If "Yes," attach proof of site control.
If "No," the Application will be deemed incomplete.

*Site control is defined as property ownership or option to purchase, signed lease or option to lease, or signed contract for use as a community solar site or option to contract for use as a community solar site.

2. The proposed community solar facility is located, in part or in whole, on preserved farmland* Yes No

If "Yes," the Application will not be considered by the Board.



*Preserved farmland is defined in N.J.A.C. 14:8-9.2 as land from which a permanent development easement was conveyed and a deed of easement was recorded with the county clerk's office pursuant to N.J.S.A. 4:1C-11 et seq.; land subject to a farmland preservation program agreement recorded with the county clerk's office pursuant to N.J.S.A. 4:1C-24; land from which development potential has been transferred pursuant to N.J.S.A. 40:55D-113 et seq. or N.J.S.A. 40:55D-137 et seq.; or land conveyed or dedicated by agricultural restriction pursuant to N.J.S.A. 40:55D-39.1.

3. The proposed community solar facility is located, in part or in whole, on Green Acres preserved open space* or on land owned by the New Jersey Department of Environmental Protection (NJDEP) Yes No

If "Yes," the Applicant must attach special authorization from NJDEP for the site to host a community solar facility. The Board will not consider Applications for projects located, in part or in whole, on Green Acres preserved open space or on land owned by NJDEP, unless the Applicant has received special authorization from NJDEP and includes proof of such special authorization in the Application package.

*Green Acres preserved open space is defined in N.J.A.C. 14:8-9.2 as land classified as either "funded parkland" or "unfunded parkland" under N.J.A.C. 7:36, or land purchased by the State with "Green Acres funding" (as defined at N.J.A.C. 7:36).

4. The proposed community solar facility is located, in part or in whole, on land located in the New Jersey Highlands Planning Area or Preservation Area Yes No

5. The proposed community solar facility is located, in part or in whole, on land located in the New Jersey Pinelands Yes No

6. The proposed community solar facility is located, in part or in whole, on land that has been actively devoted to agricultural or horticultural use and that is/has been valued, assessed, and taxed pursuant to the "Farmland Assessment Act of 1964," P.L. 1964, c.48 (C. 54:4-23.1 et seq.) at any time within the ten year period prior to the date of submission of the Application Yes No

7. The proposed community solar facility is located, in part or in whole, on a landfill Yes No
 If "Yes," provide the name of the landfill, as identified in NJDEP's database of New Jersey landfills, available at www.nj.gov/dep/dshw/lrm/landfill.htm: _____

8. The proposed community solar facility is located, in part or in whole, on a brownfield Yes No
 If "Yes," has a final remediation document been issued for the property? Yes No



If “Yes,” attach a copy of the Response Action Outcome (“RAO”) issued by the LSRP or the No Further Action (“NFA”) letter issued by NJDEP.

9. The proposed community solar facility is located, in part or in whole, on an area of historic fill Yes No
 If “Yes,” have the remedial investigation requirements pursuant to the Technical Requirements for Site Remediation, N.J.A.C. 7:26E-4.7 been implemented? Yes No
 Has the remediation of the historic fill been completed pursuant to the Technical Requirements for Site Remediation, N.J.A.C. 7:26E-5.4? Yes No
 If the remediation of the historic fill has been completed, attach a copy of the Response Action Outcome (“RAO”) issued by a Licensed Site Remediation Professional (“LSRP”) or the No Further Action (“NFA”) letter issued by NJDEP.

10. The proposed community solar facility is located on a parking lot Yes No

11. The proposed community solar facility is located on a parking deck Yes No

12. The proposed community solar facility is located on a rooftop Yes No

13. The proposed community solar facility is located on a canopy over an impervious surface (e.g. walkway) Yes No

14. The proposed community solar facility is located on the property of an affordable housing building or complex Yes No

15. The proposed community solar facility is located on a water reservoir or other water body (“floating solar”) Yes No

16. The proposed community solar facility is located on an area designated in need of redevelopment Yes No
 If “Yes,” attach proof of the designation of the area as being in need of redevelopment from a municipal, county, or state entity.

17. The proposed community solar facility is located on land or a building that is preserved by a municipal, county, state, or federal entity Yes No
 If “Yes,” attach proof of the designation of the area as “preserved” from a municipal, county, or state entity.

18. The proposed community solar facility is located, in part or in whole, on forested lands Yes No

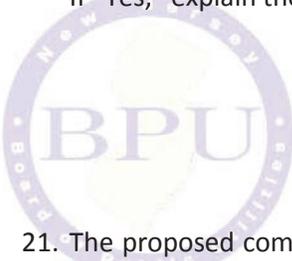


Construction of the proposed community solar facility will require cutting down one or more trees Yes No
 If "Yes," estimated number of trees required to be cut for construction: Less than 5 trees

19. The proposed community solar facility is located on land or a building owned or controlled by a government entity, including, but not limited to, a municipal, county, state, or federal entity Yes No

20. Are there any use restrictions at the site? Yes No
 If "Yes," explain the use restriction below and provide documentation that the proposed community solar project is not prohibited.

Will the use restriction be required to be modified? Yes No
 If "Yes," explain the modification below.



21. The proposed community solar facility has been specifically designed or planned to preserve or enhance the site (e.g. landscaping, land enhancements, pollination support, stormwater management, soil conservation, etc.) Yes No
 If "Yes," explain below, and provide any additional documentation in an attachment.

This project is being developed in partnership with Danielle Miller of the Raritan Valley Beekeepers. Apiaries will be installed around the PV facility while native flowering species will be planted to support the local pollinators. Additionally, the bees will aid in pollination of the feed corn crop grown on an adjacent lot. See attached email between Vanguard and Ms. Miller.

VIII. Permits

1. The Applicant has completed NJDEP Permit Readiness Checklist, and submitted it to NJDEP's PCER Yes No
 If "Yes," attach a copy of the completed Permit Readiness Checklist as it was submitted to NJDEP PCER.



If “No,” the Application will be deemed incomplete. Exception: Applications for community solar projects located on a rooftop, parking lot, or parking structure are exempt from this requirement.

2. The Applicant has met with NJDEP’s PCER Yes No

If “Yes,” attach proof of a meeting with NJDEP PCER.

If “No,” the Application will be deemed incomplete. Exception: Applications for community solar projects located on a rooftop, parking lot, or parking structure are exempt from this requirement.

3. Please list all permits, approvals, or other authorizations that will be needed for the construction and operation of the proposed community solar facility pursuant to local, state and federal laws and regulations. Include permits that have already been received, have been applied for, and that will need to be applied for. The Applicant may extend this table by attaching additional pages if necessary. These include:

- a. Permits, approvals, or other authorizations from NJDEP (i.e. Land Use, Air Quality, New Jersey Pollutant Discharge Elimination System “NJPDES”, etc.) for the property.
- b. Permits, approvals, or other authorizations from NJDEP (i.e. Land Use, Air Quality, NJPDES, etc.) directly related to the installation and operation of a solar facility on this property.
- c. Permits, approvals, or other authorizations other than those from NJDEP for the development, construction, or operation of the community solar facility (including local zoning and other local and state permits)

An Application that does not list all permits, approvals, or other authorizations that will be needed for the construction and operation of the proposed community solar facility will be deemed incomplete.

If a permit has been received, attach a copy of the permit.

| Permit Name & Description | Permitting Agency/Entity | Date Permit Applied for (if applicable) / Date Permit Received (if applicable) |
|---|---------------------------|--|
| Zoning Permit | Bethlehem Township | |
| Electrical Permit | Bethlehem Township | |
| Building Permit | Bethlehem Township | |
| Zoning Permit | Union Township | |
| Electrical Permit | Union Township | |
| Building Permit | Union Township | |
| Flood Hazard Jurisdictional Determination | NJDEP | |
| Consult: floral & endangered species | National Heritage Program | |
| Coconsultation on N. Long-Eared Bat | US Fish & Wildlife | |
| Stormwater Construction General Authorization | NJDEP | |
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4. The Applicant has consulted the hosting capacity map of the relevant EDC and determined that, based on the capacity hosting map as published at the date of submission of the Application, there is sufficient capacity available at the proposed location to build the proposed community solar facility Yes No
 If “Yes,” include a screenshot of the capacity hosting map at the proposed location, showing the available capacity.
 If “No,” the Application will be deemed incomplete.

IX. Community Solar Subscriptions and Subscribers

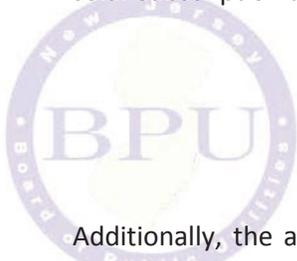
1. Estimated or Anticipated Number of Subscribers (*please provide a good faith estimate or range*):
233
2. Estimated or Anticipated Breakdown of Subscribers (*please provide a good faith estimate or range of the kWh of project allocated to each category*):
 Residential: 53% Commercial: 27%
 Industrial: 20% Other: _____ (define “other”: _____)
3. The proposed community solar project is an LMI project* Yes No
 *An LMI project is defined pursuant to N.J.A.C. 14:8-9 as a community solar project in which a minimum 51 percent of project capacity is subscribed by LMI subscribers.
4. The proposed community solar project will allocate at least 51% of project capacity to residential customers Yes No
5. The proposed community solar project is being developed in partnership with an affordable housing provider: Yes No
 If “Yes,” attach a letter of support from the affordable housing provider.
6. An affordable housing provider is seeking to qualify as an LMI subscriber for the purposes of the community solar project Yes No
 If “Yes,” estimated or anticipated percentage of the project capacity for the affordable housing provider’s subscription (*provide an estimate or range*): _____

If “Yes,” what specific, substantial, identifiable, and quantifiable long-term benefits from the community solar subscription are being passed through to their residents/tenants?



Additionally, the affordable housing provider must attach a signed affidavit that the specific, substantial, identifiable, and quantifiable long-term benefits from the community solar subscription will be passed through to their residents/tenants.

7. This project uses an anchor subscriber (*optional*) Yes No
 If "Yes," name of the anchor subscriber (*optional*): _____
 Estimated or anticipated percentage or range of the project capacity for the anchor subscriber's subscription: _____
8. Is there any expectation that the account holder of a master meter will subscribe to the community solar project on behalf of its tenants? Yes No
 If "Yes," what specific, identifiable, sufficient, and quantifiable benefits from the community solar subscription are being passed through to the tenants?



Additionally, the account holder of the master meter must attach a signed affidavit that the specific, identifiable, sufficient, and quantifiable benefits from the community solar subscription will be passed through to the tenants.

If "No," please be aware that, if, at any time during the operating life of the community solar project the account holder of a master meter wishes to subscribe to the community solar project on behalf of its tenants, it must submit to the Board a signed affidavit that the specific, identifiable, sufficient, and quantifiable benefits from the community solar subscription will be passed through to its tenants.

9. The geographic restriction for distance between project site and subscribers is: (*select one*)
- No geographic restriction: whole EDC service territory
 - Same county OR same county and adjacent counties
 - Same municipality OR same municipality and adjacent municipalities

Note: The geographic restriction selected here will apply for the lifetime of the project, barring special dispensation from the Board, pursuant to N.J.A.C. 14:8-9.5(a).



10. Product Offering: *(The Applicant must also complete and attach one or more product offering form(s) found in Appendix A. See Appendix A for exemptions.)*

The subscription proposed offers guaranteed or fixed savings to subscribers Yes No

If "Yes," the guaranteed or fixed savings are offered as:

- A percentage saving on the customer's annual electric utility bill
- A percentage saving on the customer's community solar bill credit
- Other: _____

If "Yes," the proposed savings represent:

- 0% - 5% of the customer's annual electric utility bill or bill credit
- 5% - 10% of the customer's annual electric utility bill or bill credit
- 10% - 20% of the customer's annual electric utility bill or bill credit
- over 20% of the customer's annual electric utility bill or bill credit

The subscription proposed offers subscribers ownership or a pathway to ownership of a share of the community solar facility Yes No

If "Yes," include proof of a pathway to ownership of a share of the community solar facility offered to the subscribers in Appendix A.

11. The list of approved community solar projects will be published on the Board's website. Additionally, subscriber organizations have the option of indicating, on this list, that the project is currently seeking subscribers.

If this project is approved, the Board should indicate on its website that the project is currently seeking subscribers Yes No

If "Yes," the contact information indicated on the Board's website should read:

Company/Entity Name: NJR Clean Energy Ventures, Corp. Contact Name: Garrett Lerner
 Daytime Phone: 732-919-8106 Email: glerner@njresources.com

Note: it is the responsibility of the project's subscriber organization to notify the Board if/when the project is no longer seeking subscribers, and request that the Board remove the above information on its website.

X. Community Engagement

1. The proposed community solar project is being developed by or in collaboration* with the municipality in which the project is located Yes No

If "Yes," explain how and attach a letter of support from the municipality in which the project is located.

*Collaboration with the municipality should include, at minimum, one or more meetings with relevant municipal authorities and clear evidence of municipal involvement and approval of the design, development, or operation of the proposed community solar project.

2. The proposed community solar project is being developed in collaboration* with one or more local community organization(s) Yes No

If “Yes,” explain how and attach a letter of support from the local community organization(s).

*Collaboration with a local community organization should include, at minimum, one or more meetings with the relevant local community organization(s) and clear evidence of the local community organization’s involvement and approval of the design, development, or operation of the proposed community solar project.

3. The proposed community solar project was developed, at least in part, through a community consultative process* Yes No
 If “Yes,” please describe the consultative process.

*A community consultative process should include, at minimum, one or more opportunities for public intervention and outreach to the municipality and/or local community organizations.

XI. Project Cost

1. Provide the following cost estimates and attach substantiating evidence in the form of charts and/or spreadsheet models:

Applicants are expected to provide a good faith estimate of costs associated with the proposed community solar project, as they are known at the time the Application is filed with the Board. This information will not be used in the evaluation of the proposed community solar project.

| | |
|--|----------------|
| Net Installed Cost (in \$) | \$7,202,117.00 |
| Net Installed Cost (in \$/Watt) | \$1.44/watt |
| Initial Customer Acquisition Cost (in \$/Watt) | \$.14/w dc |
| Annual Customer Churn Rate (in %) | 5% |

| | |
|--------------------------------------|------------|
| Annual Operating Expenses (in c/kWh) | 0.05/kWh |
| LCOE (in c/kWh) | \$.048/kWh |

2. Pursuant to N.J.A.C. 14:8-9.7(q), “community solar projects shall be eligible to apply, via a one-time election prior to the delivery of any energy from the facility, for SRECs or Class I RECs, as applicable, or to any subsequent compensations as determined by the Board pursuant to the Clean Energy Act.”

For indicative purposes only, please indicate all local, state and federal tax incentives which will be applied to if the proposed community solar project is approved for participation in the Community Solar Energy Pilot Program:

This project is seeking the following state and federal tax incentives: SREC (or TREC depending on PTO), the Federal Investment Tax Credit for commercial PV, and the Modified Accelerated Cost Recovery System available to commercial PV.

XII. Other Benefits

1. The proposed community solar facility is paired with another distributed energy resource:
 - a. Micro-grid project Yes No
 - b. Storage Yes No
 - c. Other (identify): _____ Yes No

2. The proposed community solar facility provides grid benefits (e.g. congestion reduction) Yes No
 If “Yes” to any, please explain how and provide supporting documents.

The installation of this distributed Community Solar asset is expected to reduce transmission line losses, increase grid resilience, avoid generation costs, and reduce need to invest in new utility generation capacity. Further, the environmental benefit will be substantial, given the 6,500+ MWh's of clean generation expected in the first year of operations. +

4. The proposed community solar project will create temporary or permanent jobs in New Jersey Yes No
 If “Yes,” estimated number of temporary jobs created in New Jersey: 65
 If “Yes,” estimated number of permanent jobs created in New Jersey: 2

5. The proposed community solar project will provide job training opportunities for local solar trainees Yes No
 If “Yes,” will the job training be provided through a registered apprenticeship? Yes No

If "Yes," identify the entity or entities through which job training is or will be organized (e.g. New Jersey GAINS program, partnership with local school):

This project will utilize Union labor, sourced from the local IBEW Chapter.

XIII. Special Authorizations and Exemptions

1. Is the proposed community solar project co-located with another community solar facility (as defined at N.J.A.C. 14:8-9.2)? Yes No
 If "Yes," please explain why the co-location can be approved by the Board, consistent with the provisions at N.J.A.C. 14:8-9.

2. Does this project seek an exemption from the 10-subscriber minimum? Yes No
 If "Yes," please demonstrate below (and attach supporting documents as relevant):

- a. That the project is sited on the property of a multi-family building.
- b. That the project will provide specific, identifiable, and quantifiable benefits to the households residing in said multi-family building.

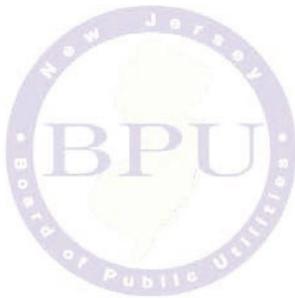


3. Specific sections throughout the Application Form are identified as optional only if: 1) the Applicant is a government entity (municipal, county, or state), and 2) the community solar developer will be selected by the Applicant via a RFP, RFQ, or other bidding process. Has the Applicant left those specific sections blank? Yes No
 If "Yes," attach a letter describing the proposed bidding process. The Applicant must further commit to issuing said RFP, RFQ, or other bidding process within 90 days of the proposed project being approved by the Board for participation in the Community Solar Energy Pilot Program. The Applicant will be required to provide the information contained in those optional sections to the Board once it becomes known.

4. Has the proposed community solar project received, in part or in whole, a subsection (t) conditional certification from the Board prior to February 19, 2019? Yes No
 If "Yes," the project may apply to participate in the Community Solar Energy Pilot Program if it commits to withdrawing the applicable subsection (t) conditional certification immediately if it is approved by the Board for participation in the Community Solar Energy Pilot Program. Attach a signed affidavit that the Applicant will immediately withdraw the applicable subsection (t)



conditional certification if the proposed project is approved by the Board for participation in the Community Solar Energy Pilot Program.



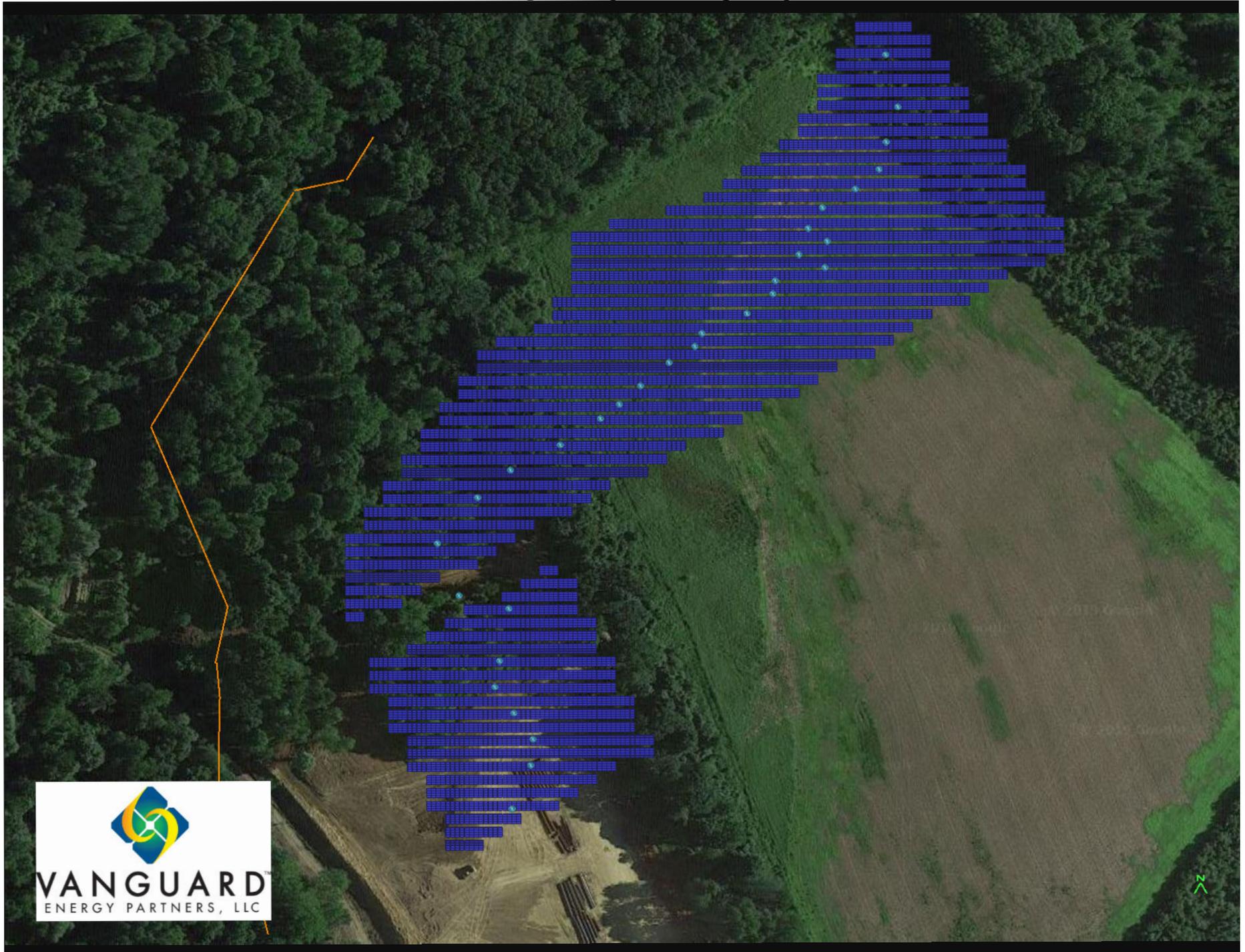
Appendix B: Required Attachments Checklist

Note that this list is for indicative purposes only. Additional attachments may be required, and are identified throughout this Application Form.

| Required Attachments for all Applications | Page | Attached? |
|--|---------|---|
| Delineated map of the portion of the property on which the community solar facility will be located. | p.7 | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| For electronic submission only: copy of the delineated map of the portion of the property on which the community solar facility will be located as a PDF and in drawing file format (.dwg) or as a shapefile (.shp). | p.7 | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| Proof of site control. | p.8 | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| Copy of the completed Permit Readiness Checklist as it was submitted to NJDEP PCER, if applicable. | p.11 | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| Proof of a meeting with NJDEP PCER, if applicable. | p.12 | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| A screenshot of the capacity hosting map at the proposed location, showing the available capacity. | p.12 | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| Substantiating evidence of project cost in the form of charts and/or spreadsheet models. | p.16 | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| Certifications in Section C. | p.19-23 | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| Product Offering Questionnaire(s). | p.24 | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |

| Required Attachments for Exemptions | Page | Attached? |
|---|--------------|---|
| The Applicant is a government entity (municipal, county, or state), and the community solar developer will be selected by the Applicant via a Request for Proposals (RFP), Request for Quotations (RFQ), or other bidding process: ⇒ Attach a letter from the Applicant describing the bidding process | p.6, p.19 | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| The proposed community solar project is located, in part or in whole, on Green Acres preserved open space or on land owned by NJDEP. ⇒ Attach special authorization from NJDEP for the site to host a community solar facility. | p.8 | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| The proposed community solar project has received, in part or in whole, a subsection (t) conditional certification from the Board prior to February 19, 2019. ⇒ Attach a signed affidavit that the Applicant will immediately withdraw the applicable subsection (t) conditional certification if the proposed project is approved by the Board for participation in the Community Solar Energy Pilot Program. | p. 19 | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |

Pattensburg Quarry PV Design Layout



Design 1 Pattenburg Quarry, Mulhockaway Creek

Report

| | |
|-----------------|---|
| Project Name | Pattenburg Quarry |
| Project Address | Mulhockaway Creek |
| Prepared By | Shannon Donnelly sdonnelly@vepenergy.com |

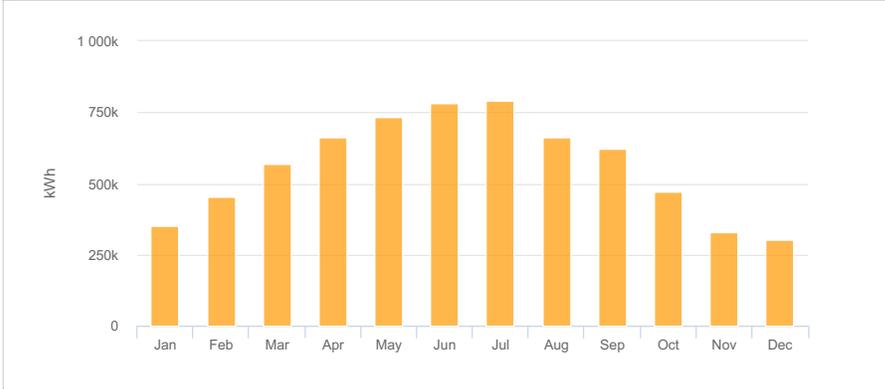
System Metrics

| | |
|-----------------------|--|
| Design | Design 1 |
| Module DC Nameplate | 4.99 MW |
| Inverter AC Nameplate | 3.88 MW Load Ratio: 1.29 |
| Annual Production | 6,720 GWh |
| Performance Ratio | 85.7% |
| kWh/kWp | 1,347.9 |
| Weather Dataset | TMY, 10km Grid (40.65,-75.05), NREL (prospector) |
| Simulator Version | 68a31560b4-3cc1846ea1-559aa8be28-df1979fd34 |

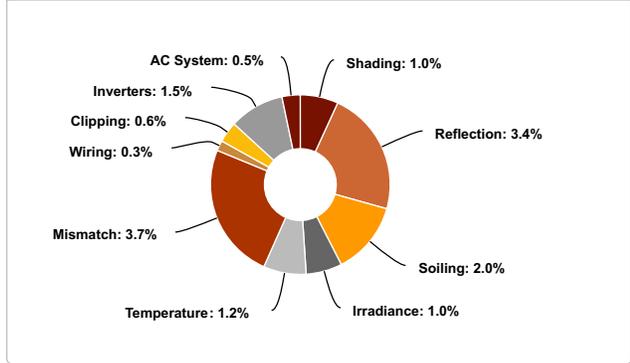
Project Location



Monthly Production



Sources of System Loss



Annual Production

| | Description | Output | % Delta |
|----------------------------------|-------------------------------------|--------------------|--------------|
| Irradiance (kWh/m ²) | Annual Global Horizontal Irradiance | 1,451.4 | |
| | POA Irradiance | 1,572.4 | 8.3% |
| | Shaded Irradiance | 1,556.0 | -1.0% |
| | Irradiance after Reflection | 1,502.7 | -3.4% |
| | Irradiance after Soiling | 1,472.6 | -2.0% |
| | Total Collector Irradiance | 1,472.6 | 0.0% |
| Energy (kWh) | Nameplate | 7,342,520.5 | |
| | Output at Irradiance Levels | 7,269,889.7 | -1.0% |
| | Output at Cell Temperature Derate | 7,184,810.4 | -1.2% |
| | Output After Mismatch | 6,916,062.1 | -3.7% |
| | Optimal DC Output | 6,896,602.9 | -0.3% |
| | Constrained DC Output | 6,857,333.8 | -0.6% |
| | Inverter Output | 6,753,900.0 | -1.5% |
| | Energy to Grid | 6,720,130.0 | -0.5% |
| Temperature Metrics | | | |
| | Avg. Operating Ambient Temp | | 12.5 °C |
| | Avg. Operating Cell Temp | | 19.9 °C |
| Simulation Metrics | | | |
| | Operating Hours | 4687 | |
| | Solved Hours | 4687 | |

Condition Set

| | | | | | | | | | | | | |
|------------------------------|--|-------|---------|-------------------|---|---|---|---|---|---|---|-----------------------|
| Description | Condition Set 1 | | | | | | | | | | | |
| Weather Dataset | TMY, 10km Grid (40.65,-75.05), NREL (prospector) | | | | | | | | | | | |
| Solar Angle Location | Meteo Lat/Lng | | | | | | | | | | | |
| Transposition Model | Perez Model | | | | | | | | | | | |
| Temperature Model | Sandia Model | | | | | | | | | | | |
| Temperature Model Parameters | Rack Type | a | b | Temperature Delta | | | | | | | | |
| | Fixed Tilt | -3.56 | -0.075 | 3°C | | | | | | | | |
| | Flush Mount | -2.81 | -0.0455 | 0°C | | | | | | | | |
| | East-West | -3.56 | -0.075 | 3°C | | | | | | | | |
| | Carport | -3.56 | -0.075 | 3°C | | | | | | | | |
| Soiling (%) | J | F | M | A | M | J | J | A | S | O | N | D |
| | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Irradiation Variance | 5% | | | | | | | | | | | |
| Cell Temperature Spread | 4° C | | | | | | | | | | | |
| Module Binning Range | -2.5% to 2.5% | | | | | | | | | | | |
| AC System Derate | 0.50% | | | | | | | | | | | |
| Module Characterizations | Module | | | | | | | | | | | Characterization |
| | Mono 380 Wp 72 Cells 1500V (RECOM-SILLIA) | | | | | | | | | | | RECOM_72M380.PAN, PAN |
| Component Characterizations | Device | | | | | | | | | | | Characterization |
| | SG 125HV (Sungrow) | | | | | | | | | | | Spec Sheet |

Components

| Component | Name | Count |
|-----------|---|--------------------|
| Inverters | SG 125HV (Sungrow) | 31 (3.88 MW) |
| Strings | 10 AWG (Copper) | 551 (133,757.1 ft) |
| Module | RECOM-SILLIA, Mono 380 Wp 72 Cells 1500V (380W) | 13,120 (4.99 MW) |

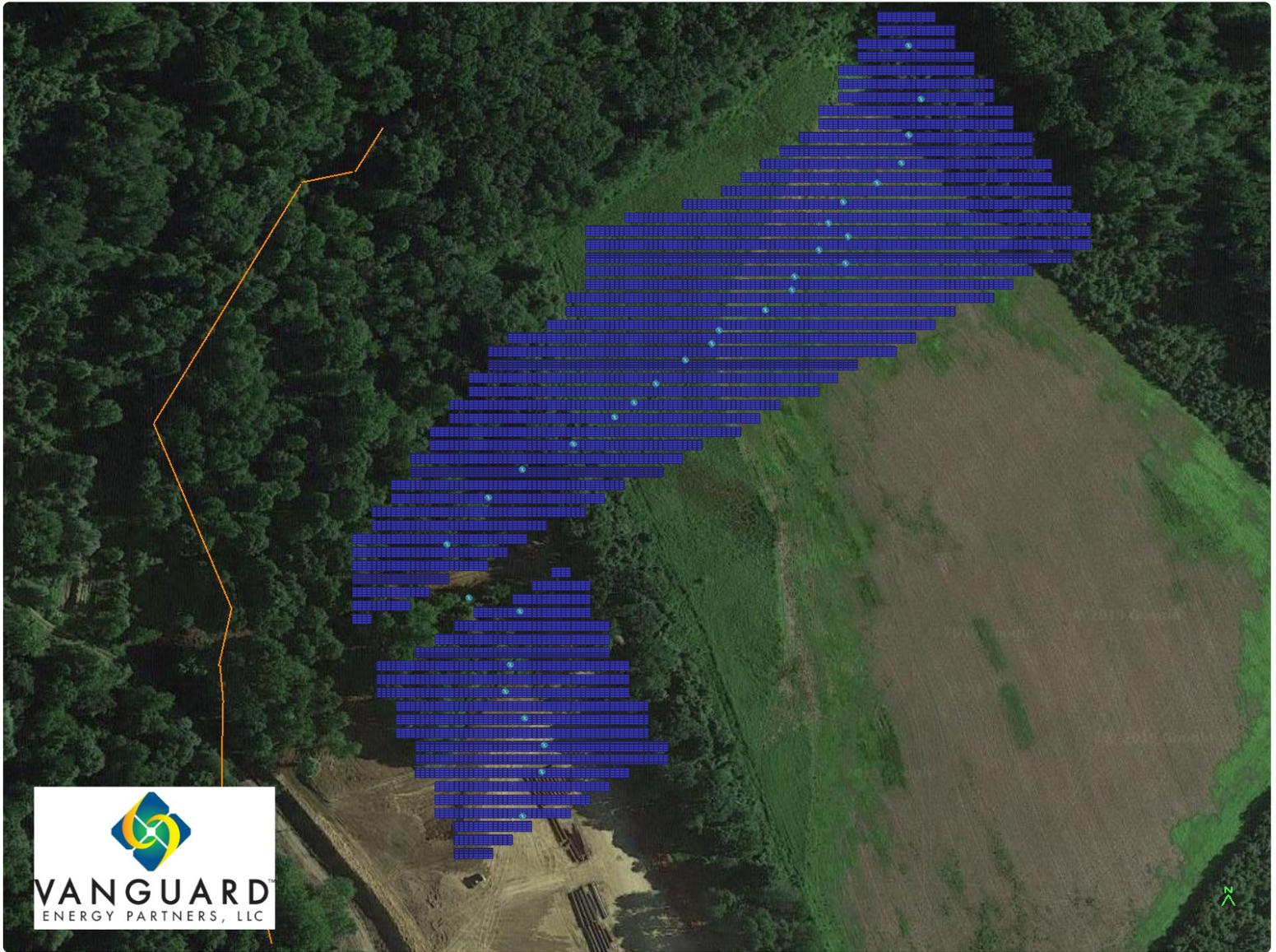
Wiring Zones

| Description | Combiner Poles | String Size | Stringing Strategy |
|-------------|----------------|-------------|--------------------|
| Wiring Zone | 12 | 23-26 | Along Racking |

Field Segments

| Description | Racking | Orientation | Tilt | Azimuth | Intrarow Spacing | Frame Size | Frames | Modules | Power |
|-----------------|------------|------------------------|------|---------|------------------|------------|--------|---------|---------|
| Field Segment 1 | Fixed Tilt | Landscape (Horizontal) | 10° | 180° | 5.2 ft | 4x4 | 631 | 10,096 | 3.84 MW |
| Field Segment 2 | Fixed Tilt | Landscape (Horizontal) | 10° | 180° | 5.2 ft | 4x4 | 189 | 3,024 | 1.15 MW |

Detailed Layout



LAND LEASE OPTION AGREEMENT

THIS LAND LEASE OPTION AGREEMENT (hereinafter, this “*Option*”) is made on this 24 day of July, 2019, (Effective Date) by Pattenburg Quarry Industries, LLC a New Jersey limited liability company having offices at 31 Tannery Road Branchburg NJ, 08876 (the “*Lessor*”), and Vanguard Energy Partners, LLC., a New Jersey limited liability company , having offices at 2 Commerce street, Branchburg, NJ 08876, . (the “*Lessee*”);

Recitals:

WHEREAS, the Lessor is the record owner of parcel of land located at Bethlehem Township, Hunterdon County Block 12 Lots 4 & 5 and more particularly described on Exhibit A annexed hereto and hereby incorporated by reference herein (the “*Property*”); and

WHEREAS, the Lessee desires to Option the Property toward a permanent Lease as further delineated on Exhibit A (the “*Optioned Premises*”) and the Lessor desires to grant the same to the Lessee under the terms and conditions set forth herein;

NOW, THEREFORE, in consideration of the mutual terms, covenants, and agreements of the parties herein set forth and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Lessor and the Lessee hereby covenant and agree as follows:

1. Definitions. All terms previously defined retain their meanings and are incorporated herein. Certain other initially-capitalized terms shall bear the respective meanings designated hereinafter.

2. Purpose and Permitted Use. The purpose of this Option to Lease is to develop a New Jersey Community Solar Energy Facility under the Pilot Program. N.J.A.C.14:8-9. The Lessee agrees to restrict the use of the Optioned Premises to such purposes and shall not use or permit the use of the Optioned Premises for any other purpose without first obtaining the consent of the Lessor.

3. Term.

(a) The term of this Option to Lease is for a period of 24 months (the “*Term*”), commencing as of the Effective Date.

(b) In the event the Lessee shall desire to extend its occupancy of the Optioned Premises beyond the Term, the parties shall negotiate mutually acceptable terms and conditions and execute an amendment hereto or an entirely new option agreement to reflect such extended tenancy.

(c) At the expiration or earlier termination of this Option, the Lessee shall

surrender the Optioned Premises in good condition and repair, normal wear and tear excepted. The Lessee shall, at its sole cost and expense, remove any and all equipment and temporary fixtures located or installed on the Optioned Premises and any structure, equipment, or fixture that remains on the Optioned Premises at the expiration or termination of this Option shall become the property of the Lessor without further compensation to the Lessee for the value of same.

4. Rent. In consideration of its occupancy of the Optioned Premises, the Lessee shall pay the Lessor a one-time fee of five hundred dollars (\$500.00).

5. Improvements.

(a) The Lessee shall not construct any improvements on the Optioned Premises without the express prior written consent of the Lessor.

(c) Any entry on the Property by the Lessee's contractors and subcontractors shall be deemed to be under and subject to all of the terms, covenants, provisions, and conditions of this Option and such contractors and subcontractors shall provide proof of insurance in such amounts as required by the Lessor.

(d) The Lessee is solely liable and responsible for all materials, work, installations, equipment, decorations, and other items that are brought upon or installed by it in or on the Optioned Premises and the Lessor shall have no liability whatsoever in connection therewith.

(e) The Lessee shall use commercially reasonable efforts not to permit any construction lien or notice of unpaid balance to be filed against the interests of the Lessor or the Lessee in the Optioned Premises, or any of the improvements thereon, by reason of any work, labor, services, or materials supplied to or for the benefit of the Lessee or the Lessor and the Lessee agrees to defend, indemnify, and save harmless the Lessor from and against any such lien. If any such construction lien or notice of unpaid balance shall be filed at any time, the Lessee shall cause the same to be discharged within ninety (90) days; provided, however, if the Lessee shall promptly bond the entire amount of such lien with a responsible surety company, the Lessee may contest the amount or validity, in whole or in part, of any such lien by appropriate proceedings, diligently prosecuted, and such contest shall defer, for its duration, the Lessee's duty hereunder to discharge the same. Upon request by the Lessee, the Lessor shall execute and deliver any and all documents and take any and all actions as shall be reasonably necessary or proper to permit the Lessee to bring such proceedings in the Lessee's name or on the Lessor's behalf to facilitate the conduct of such proceedings by the Lessee. The Lessee covenants to defend and save harmless the Lessor from and against any and all liability for the payment of any cost or expense in connection with any such proceedings.

6. Utilities. All utility services of any kind, whether permanent or temporary, to be installed on or otherwise for the purpose of servicing the Optioned Premises shall be located or installed (with the approval of the Lessor) at the sole cost of the Lessee and shall be maintained in the name of the Lessor throughout the Term. The Lessee shall be responsible for the payment of all charges for utility service to the Optioned Premises.

7. **Real Property Taxes.** The Lessor shall be responsible for and timely pay all real estate taxes and other similar impositions imposed by any governmental authority against the Optioned Premises.

8. **Signs/Displays.** Any permanent signage affixed to or at the Optioned Premises shall be subject to the Lessor's approval and further subject to all applicable laws and ordinances.

9. **Care and Maintenance of Property.** Throughout the Term, the Lessee shall, at its sole cost and expense, maintain the Optioned Premises in a good and safe condition and keep same in a clean condition, free from debris, trash, and refuse.

10. **Right of Entry and Inspection.** The Lessor, or its agents, employees, or representatives, shall have the right to enter upon the Optioned Premises at any time for the purpose of inspecting same and making any repairs or alterations therein.

11. **Compliance With Laws and Fire Prevention and Safety.** Throughout the Term, the Lessee shall comply with all applicable statutes, ordinances, requirements, rules, and directives of all municipal, county, state, and federal authorities, now in force or which may hereafter be in force, pertaining to its use of the Optioned Premises, including, but not limited to, all requirements of local governmental fire officials with regard to fire prevention and safety.

12. Hazardous Material.

(a) The Lessee agrees to refrain, and to prevent its employees, invitees, agents, contractors, and subtenants, from bringing any Hazardous Materials (as hereinafter defined) onto the Optioned Premises. The Lessee hereby covenants and agrees to indemnify, defend, and hold the Lessor harmless from and against any and all claims, actions, administrative proceedings, judgments, damages, penalties, costs, expenses (including, but not limited to, reasonable legal fees), losses, and liabilities of any kind or nature that arise (indirectly or directly) from or in connection with the presence of spill (or suspected spill), or discharge (or suspected discharge) of any Hazardous Materials brought in, on, or about the Optioned Premises at any time after possession thereof by the Lessee.

(b) The term "**Hazardous Materials**" shall mean any hazardous or toxic substances, materials, wastes, pollutants, and the like which are defined as such in, or regulated by (or become defined in and/or regulated by), any legal requirement which is presently in effect or hereafter enacted relating to environmental matters or any rules and regulations promulgated under any legal requirement.

13. Indemnification.

(a) The Lessee, by executing this Option to Lease, does hereby indemnify, defend, and hold harmless the Lessor, its successors and assigns, employees, designees, and invitees from and against any and all personal injury and property damage claims, demands, suits, actions at law or equity or otherwise, judgments, arbitration determinations, damages, liabilities, decrees of any individual or entity claiming to be or being harmed as a result of the Lessee's use and occupancy of the Optioned Premises pursuant to this Agreement. This indemnification shall

specifically include, but not be limited to, any and all costs, reasonable attorneys fees, court costs, and any other expenses that may be incurred by the Lessor in connection with any and all claims, demands, suits, actions at law or equity, or otherwise or arbitration proceedings which may arise in connection with any claim for which the Lessor may or may not be claimed to be liable in whole or in part relating to any injury or damage caused by the Lessee's use and occupancy of the Optioned Premises pursuant to this Agreement.

(b) The Lessee does further hereby waive and otherwise give up any and all rights and claims which the Lessee may have against the Lessor relating to any injury or damage caused by the Lessee's use and occupancy of the Property pursuant to this Agreement.

(c) Any and all contractors or professionals hired by the Lessee to perform work at or within the Optioned Premises shall be required to provide the Lessor indemnification to the same extent as set forth herein.

(d) In claims against any person or entity indemnified under this paragraph by an employee of the Lessee, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, the indemnification obligation of this subparagraph shall not be limited by a limitation on amount or type of damages, compensation or benefits payable by or for the Lessee or their agents or invitees under workers compensation acts, disability benefit acts or other employee benefit acts.

15. Assignment and Subletting. The Lessee shall not assign this Option to Lease without the express prior written consent of the Lessor.

19. Notices. Any notice or other communication required or which may be given hereunder shall be in writing and shall be delivered personally or sent by electronic mail, commercial overnight courier, or certified mail, return receipt requested and postage prepaid, and shall be deemed given when so delivered personally or, if sent by electronic mail, upon acknowledgment of receipt by the recipient or, if sent by commercial overnight courier, one (1) day after the date so sent or, if sent by certified mail, four (4) days after the date of mailing, to the parties at their respective addresses set forth below, any party, by notice given in accordance herewith to the other party or parties, being entitled to designate another address or person for receipt of notices hereunder:

(a) if to the Lessor, to: Tony Ferreira 31 Tannery Road Branchburg, NJ
08876

(b) if to the Lessee, to: Alex Rivera 2 Commerce street Branchburg, NJ
08876

22. Interpretation. No provision of this Option shall be construed against or interpreted to the disadvantage of either the Lessor or the Lessee by any court or other governmental or judicial authority by reason of either the Lessor or the Lessee having or being deemed to have drafted, structured, or dictated such provision. The section headings herein are inserted only as a matter of convenience and for reference and in no way to define, limit, or describe the scope of this Option or the intent of any provision hereof. The neuter gender, when used herein, shall be deemed to include all individuals and entities and words used in the singular shall include words in the plural where the text of this Option so requires.

23. Severability. If any provision of this Option shall be determined to be invalid or unenforceable, in whole or in part, then such determination shall not affect the remaining portions of this Option, which shall remain in full force and effect.

24. Entire Agreement. This Option sets forth all of the promises, agreements, conditions, and understandings between the parties relating to this Option and the Lessee's tenancy of the Optioned Premises and there is no promise, agreement, condition, or understanding, either oral or written, between the parties relating to this Option or the use of the Optioned Premises other than as is herein set forth.

25. Modification and Amendment. This Option to Lease may not be modified or amended except upon the written consent of both the Lessor and the Lessee.

27. Applicable Law. This Option shall be governed by, and construed in accordance with, the laws of the state of New Jersey.

29. Counterparts. This Option may be executed by the parties hereto by original, facsimile, or pdf signatures in one or more separate counterparts, each of which when so executed and delivered shall be an original but all such counterparts together constituting one and the same instrument.

30. Opportunity to Consult With Counsel. **THE DECISION OF EACH OF THE PARTIES TO EXECUTE THIS OPTION IS A FULLY INFORMED DECISION AND EACH PARTY HAS HAD AMPLE OPPORTUNITY TO CONSULT WITH COUNSEL OF ITS OWN CHOOSING AND IS AWARE OF ALL THE LEGAL AND OTHER RAMIFICATIONS OF HIS OR ITS EXECUTION HEREOF.**

IN WITNESS WHEREOF, and intending to be bound hereby, the parties hereto have set their hands and seals, or caused this Option to be duly executed, as of the date set forth first set forth above.

LESSOR

By: 
Nelson Ferreira

LESSEE

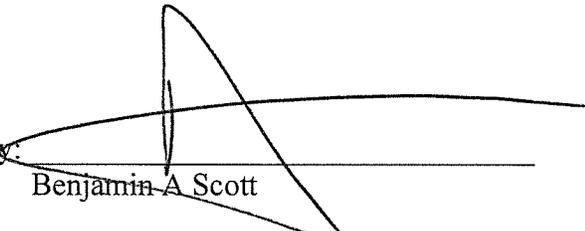
By: 
Benjamin A Scott

Exhibit A

Map of Property and Optioned Premises

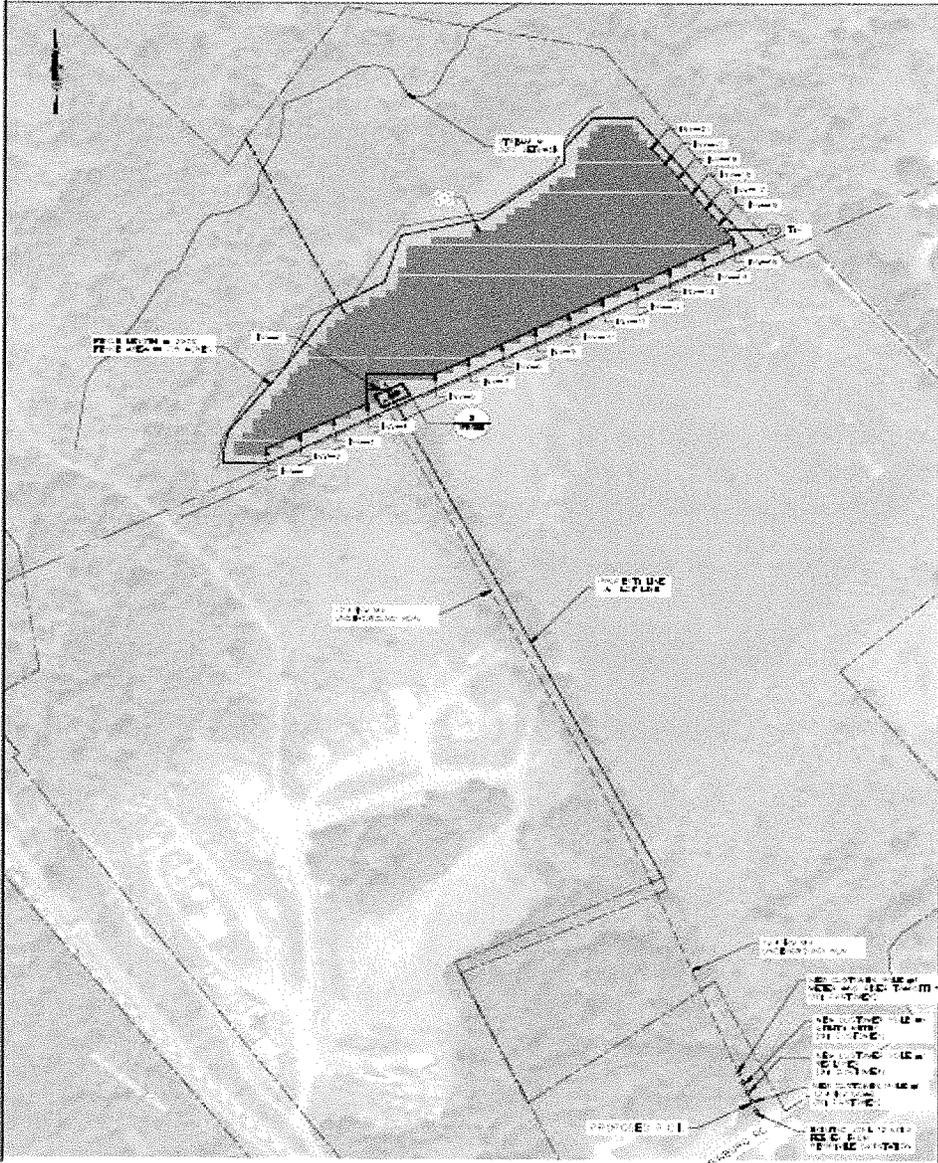


Exhibit B

REQUIRED INSURANCE COVERAGES and LIMITS

1. **Workers' Compensation and Employer's Liability:** Provided in the State in which the work is to be performed and elsewhere as may be required and shall include:

- a) Workers' Compensation Coverage: Statutory Requirements
- b) Employers Liability Limits not less than:
 - Bodily Injury by Accident: \$500,000 Each Accident
 - Bodily Injury by Disease: \$500,000 Each Employee
 - Bodily Injury by Disease: \$500,000 Policy Limit
- c) Policies shall include endorsements to ensure coverage under USL&H, Maritime Liability, FELA, and DBA Coverage, if applicable.

2. **Commercial General Liability:** Provided on the latest version of ISO form CG 00 01 or an equivalent form including Premises-Operations, Independent Contractors, Products/Completed Operations, Broad Form Property Damage, Contractual Liability, and Personal Injury and Advertising Injury.

- a) Occurrence Form with the following limits:
 - (1) General Aggregate: \$2,000,000
 - (2) Products/Completed Operations Aggregate: \$2,000,000
 - (3) Each Occurrence: \$1,000,000
 - (4) Personal and Advertising Injury: \$1,000,000
- b) Products/Completed Operations Coverage must be maintained for a period of at least three (3) years after final payment / completion of work (including coverage for the Additional Insureds as set forth in these Insurance Requirements).
- c) The General Aggregate Limit must apply on a Per Project basis.
- d) No Exclusions for development, construction, building conversion, etc. with respect to the project's location and / or where the work is to be completed by the Contractor.
- e) Coverage for "Resulting Damage".
- f) No sexual abuse or molestation exclusion.
- g) No amendment to the definition of an "Insured Contract".
- h) The definition of an "Insured Contract" must be amended to provide coverage for all work on or within 50 feet of a railroad. A stand-alone Railroad Protective Liability policy may be required based on the scope of this project.

3. **Automobile Liability:**

- a) Coverage to include All Owned, Hired and Non-Owned Vehicles (or "Any Auto"), if you do not have any Owned Vehicles you are still required to maintain coverage for Hired and Non-Owned Vehicles as either a stand-alone policy or endorsed onto the Commercial General Liability policy above
- b) Per Accident Combined Single Limit \$1,000,000
- c) For Lessee(s) involved in the transportation of hazardous material, include the following endorsements: MCS-90 and ISO-9948.

4. **Commercial Umbrella Liability:**

- a) Policy(ies) to apply on a Following Form Basis of the following:
 - (1) Commercial General Liability,
 - (2) Automobile Liability, and

(3) Employers Liability Coverage.

| | |
|-------------------------------------|--------------|
| b) Minimum Limits of Liability | |
| Occurrence Limit: | \$10,000,000 |
| Aggregate Limit (where applicable): | \$10,000,000 |

5. **Pollution Liability Insurance:**

- a) Covering losses caused by pollution incidents that arise from the operations of the Lessee at the demised premises. This is to include all work completed by the Lessee, including testing and / or removal of any and all pollutants.
- b) Minimum Limits of Liability:

| | |
|-------------------|-------------|
| Occurrence Limit: | \$2,000,000 |
| Aggregate Limit: | \$2,000,000 |
- c) Insurance to be maintained for the duration of the Option and for a period of three (3) years after expiration of the Option.
- c) No Exclusions for Silica, Asbestos, Lead and / or Lead Based Paint testing.
- d) Include Mold Coverage for full policy limit of liability.
- e) Shall include coverage for all pollutants as defined under the Resource Conservation and Recovery Act, as amended, 42 U.S.C. Section 6901 et. Seq. ("RCRA") or any related state or city environmental statute or the removal of any petroleum contaminated material at the project.
- f) All owned and / or 3rd Party disposal facilities must be licensed and maintain pollution liability insurance of not less than \$2,000,000, if applicable.

6. **Owned, Optioned, Rented or Borrowed Property:** Lessee shall maintain Property Insurance for their owned, Optioned, rented or borrowed property for the entire Option period subject to the following coverages:

- a) Full Replacement Costs Basis;
- b) Agreed Amount/No Coinsurance;
- c) All Risk Coverage;
- d) Provide a Blanket Waiver of Subrogation to the Lessor; in the event of a loss the Lessee's insurance carrier agrees not to seek subrogation against the Lessor; and
- e) Other Coverages the Lessee deems appropriate.

Updated 10/11/16

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF PERMIT COORDINATION AND ENVIRONMENTAL REVIEW

PERMIT READINESS CHECKLIST

FOR PCER OFFICE USE ONLY

DATE RECEIVED ___

PRC ID NUMBER ___

Completion of this form will assist the Department in determining what permits might be needed to authorize a project and to insure that all appropriate programs attend a pre-application meeting. Please fill out the below form as completely as possible, noting any areas you are not sure of and including any information about the project and the site that might help the Department determine the permitting needs of the project.¹

1. Please complete the following questions if applicable and return to the Department with a **1 to 2 page narrative description of project, its function, and its benefits; as well as a site plan, maps, aerial photos, GIS shape files, etc.**

A. GENERAL INFORMATION

1. Name of Proposed Project Pattenburg Community Solar
2. Consultant/Contact Information (if any) ___
3. Name/Address of Prospective Applicant Vanguard Energy Partners, LLC
2 Commerce Street
Branchburg, NJ 08876

Address/tel./fax 908- 534- 1302
Company Name Vanguard Energy Partners, LLC
Address/tel./fax 2 Commerce Street,
Branchburg, NJ 08876
908- 534- 1302

4. Does the project have any existing NJDEP ID#s assigned? i.e., Case number, Program Interest (PI)#, Program ID#?

B. PROPOSED PROJECT LOCATION

Street Address/munic. 455 Route 614, Bethlehem Twp.

¹ Please be advised that this form is not a permit application. To receive authorization, approval, or a permit to conduct regulated activities, a formal application must be filed and a formal permit or authorization issued by the appropriate Bureau within the Department prior to the conduct of regulated activity. This form is used solely for the Department's preliminary review and discussion of this project to determine what permits or authorizations may be needed to conduct the proposed activity. Any guidance offered to the applicant during this process is not binding on the Department or the applicant and a final response can only be rendered through the actual issuance of permits, approvals, or authorizations.

County Hunterdon Zip Code 08802
Block No. 12 Lot No. 4
Block No. 12 Lot No. 5
Block No. 12 Lot No. 22
X Coordinate in State Plane (project centroid) 348,214
Y Coordinate in State Plane (project centroid) 658,891

C. PROPOSED ACTIVITY DESCRIPTION AND SCHEDULE

1. Project Type: New Construction Brownfield Redevelop.
Alternative Energy Other (Please describe)
 - a) Estimated Schedule: Date permits needed or desired by, beginning construction date; construction completion, and operation of facility date: December 15, 019
 - b) Funding Source: Is any Federal Funding being used for this project? No
State Funding over 1 million dollars? Yes, under the NJCEP SREC program
Is funding secured at this time? No Is funding conditional? Yes If so, on what?
Program acceptance into NJCEP's Community Solar Program
 - c) Is the project contingent on receiving the identified funding? Yes
If yes, explain If the project does not qualify under the NJCEP Community Solar SREC program, the project is not financially viable.
 - d) What DEP permits do you think you need for this project? (The Department will confirm this through the PRC process).
2. For additional guidance on Department permits, please refer to the Permit Identification Form (PIF) which will be forwarded upon request. The PIF does not need to be filled out or submitted to the Department.
 - a) Which Department(s), Bureau(s), and staff have you contacted regarding your proposed project? No
 - b) Are there any Department permits that will need to be modified as a result of this project. Please explain and identify the project reviewer of the permit to be modified.
Unknown
 - c) Please identify any pre-permit actions or modifications you have applied for or obtained from the Department or other state agencies for this project:
 - 1) Water Quality Management Plan consistency _____
 - 2) Highlands Consistency _____
 - 3) Wetland Delineation (LOI) _____
 - 4) Tidelands Conveyance _____
 - 5) Flood Hazard Jurisdiction or determinations _____
 - 6) Water Allocation _____
 - 7) Site Remediation RAW, Remedial Action Permit – Soil and or Groundwater, NJPDES Discharge to Ground Water, NJPDES Discharge to Surface Water, No Further Action Response Action Outcome _____
 - 8) Landfill Disruption Approval _____
 - 9) Landfill Closure Plan _____
 - 10) Other _____

3. Please submit this Permit Readiness Checklist form, completed to the extent possible, electronically to Ruth.Foster@dep.nj.gov and Megan.Brunatti@dep.nj.gov and one (1) copy via mail² with the following items if available:
- (a) The completed Permit Readiness Checklist;
 - (b) A description of the proposed project;
 - (c) Any overarching regulatory or policy call(s) or guidance that the Department must make or make known prior to the receipt of the application to determine the project's feasibility, regulatory, or review process.
 - (d) USGS map(s) with the site of the proposed project site boundaries clearly delineated (including the title of the USGS quadrangle sheet from which it was taken)³;
 - (e) Aerial photos/GIS information regarding the site;
 - (f) A site map including any known environmental features (wetlands, streams, buffers, etc⁴);
 - (g) Site plans to the extent available;
 - (h) Street map indicating the location of the proposed project;
 - (i) Any other information that you think may be helpful to the Department in reviewing this project.
 - (j) List of any local or regional governments or entities, their historical involvement in this project or site, identification of conflicts with DEP rules; with contact names and information whose attendance/input would be helpful in facilitating this project, ie Soil Conservation Districts, health departments, local zoning officials, etc.

D. The following are questions by Program to guide the Department in its determination of what permits may be needed to authorize this project. If the questions do not apply to the proposed project please indicate N/A. Please include any other information you think may be helpful for the Department to determine which permits are needed.

WATER AND WASTE WATER INFORMATION

DEP Safe Drinking Water Program (609) 292-5550

<http://www.nj.gov/dep/watersupply/>

Is the project located within an existing water purveyor service area? If yes, which one? No

Will the project affect any land or water controlled by a Water Supply Authority or water purveyor in New Jersey? If so, please identify and explain. No

Does the purveyor have adequate firm capacity and allocation to support project demand? Not Applicable

² Submit to: New Jersey Department of Environmental Protection
Office of Permit Coordination and Environmental Review
P.O. Box 420, Mail Code 07J
Trenton, New Jersey 08625
Street Location: 401 East State Street, 7th Floor East Wing
Telephone Number:(609) 292-3600
Fax Number: (609) 292-1921

³ USGS maps may be purchased from NJDEP, Maps and Publications, P.O. Box 420, Trenton 08625-0420; (609) 777-1038

⁴ NJGIS information

Do water pipes currently extend to the project location? No

If not, is it located within a franchise area? No

Does the project have an approved Safe Drinking Water main extension permit? No

Will the project affect any land or water controlled by a Water Supply Authority or water purveyor in New Jersey? If so, please identify and explain. No

DEP Water Allocation Program (609) 292-2957

<http://www.nj.gov/dep/watersupply>

Is the project seeking a new ground water allocation or modification? If yes, does the project have all necessary well location and safe drinking water permits? No

Is the project located within an area of critical water supply concern? No

Will this project have the capability to divert more than 100,000 gallons per day from a single source or a combination of surface or groundwater sources? No

Will this project draw more than 100,000 gallons per day of ground or surface water for construction or operation? No

WATER POLLUTION MANAGEMENT ELEMENT

DIVISION OF WATER QUALITY

Non-Point Pollution Control (609) 292-0407

http://www.nj.gov/dep/dwq/bnpc_home.htm

The **Bureau of Non-Point Pollution Control (BNPC)** is responsible for protecting and preserving the state's groundwater resources through the issuance of NJPDES Discharge to Groundwater Permits and is responsible for permitting industrial facilities and municipalities under NJPDES for discharges of stormwater to waters of the State.

Groundwater Section (609) 292-0407

This Program does not issue NJPDES-DGW permits for remediation operations.

The following definitions should be used to assist in identifying discharge activities:

Subsurface disposal system is any contrivance that introduces wastewater directly to the subsurface environment, such as, but not limited to: septic systems, recharge beds, trench systems, seepage pits, and dry wells.

Injection/recharge wells are constructed such that they are deeper than they are wide, receive effluent via gravity flow or pumping, and include dry wells and seepage pits.

Overland flow is the introduction of wastewater to the ground surface, over which the wastewater travels and eventually percolates or evaporates.

Industrial wastewater is any wastewater or discharge which is not sanitary or domestic in nature, including non-contact or contact cooling water, process wastewater, discharges from floor drains, air conditioner condensate, etc.

1. Will the project/facility have a sanitary wastewater design flow

which discharges to groundwater in excess of 2,000 gallons per day? No

2. Will the project/facility generate a discharge to groundwater of industrial wastewater in any quantity? No

3. Will the project/facility involve the discharge to groundwater by any of the following activities or structures, or include as part of the design any of these activities or structures? No

Please indicate which:

Upland CDF (Dredge Spoils) Spray Irrigation N/A

Overland Flow Subsurface Disposal System (UIC) N/A

Landfill Infiltration/Percolation Lagoon N/A

Surface Impoundment N/A

Please specify the source of wastewater for every structure identified above (e.g., sanitary wastewater to a subsurface disposal system or non-contact cooling water to a dry well): N/A

Please specify lining materials for each lined structure identified as being used by the proposed project and give its permeability in cm/sec (e.g., 8-inch thick concrete lined evaporation pond at 10^{-7} cm/sec): N/A

Does your project/facility include an individual subsurface sewage disposal system design for a facility with a design flow less than 2,000 gallons per day which does not strictly conform to the State's standards? N/A

Does your project involve 50 or more realty improvements? No

DEP Pretreatment and Residuals program (609) 633-3823

Will the project involve the discharge of industrial/commercial wastewater to a publicly owned treatment works (POTW)? No

If yes, name of POTW: _____

Volume of wastewater (gpd): _____

Will/does this project involve the generation, processing, storage, transfer and/or distribution of industrial or domestic residuals (including sewage sludge, potable water treatment residuals and food processing by-products) generated as a result of wastewater treatment. If so, please explain.
No.

Stormwater Program (609) 633-7021

<http://www.njstormwater.org/>

http://www.state.nj.us/dep/dwq/ispp_home.html

Will your site activity disturb more than one acre? Yes

Will any industrial activity be conducted at the site where material is exposed to the rain or other elements? No

Does your facility have an existing NJPDES permit for discharge of stormwater to surface groundwater?
No

Is your facility assigned one of the following Standard Industrial Classification (SIC) Codes? No
(To determine your SIC Code see the box "Industry Code" on your New Jersey Department
of Labor Quarterly Contribution Report. (Requested from Moco 8/6/19)

Surface Water Permitting (609) 292-4860

<http://www.nj.gov/dep/dwq/swp.htm>

Will this wastewater facility discharge to Surface Water? _____ Yes/No X

If yes, state the name of the proposed receiving stream N/A

Describe the proposed discharge of wastewater to Surface Water N/A

If no, how is the wastewater proposed to be discharged (e.g., to be conveyed to another STP, Publicly
Owned Treatment Works, etc. N/A

MUNICIPAL FINANCE AND CONSTRUCTION ELEMENT

Treatment Works Approvals (609) 984-4429

<http://www.nj.gov/dep/dwq/twa.htm>

Will this project include the construction, expansion or upgrade of a domestic or industrial wastewater
treatment facility or an off-site subsurface disposal system that generates more than 2,000 gallons per
day? N/A If yes, explain _____

Will the project result in a construction design of more than 8000 gallons of water discharge per day?
N/A

Office of Water Resources Management Coordination (609)777-4359

<http://www.state.nj.us/dep/wrm>

Sewer Service

Is the project in an approved sewer service area for the type of waste water service needed? N/A
If yes, what is the name of the sewer service area? _____

Has this project received endorsement from the appropriate sewer authority with adequate conveyance
and capacity? N/A

Do waste water pipes currently extend to the project location? N/A

Is the project consistent with and in an area covered by an up to date Wastewater Management Plan? N/A

Will an amendment to the existing WQMP be required to accommodate this project? N/A

If tying into an offsite treatment plant, is the capacity and conveyance system currently available? N/A

What is the volume of wastewater that will be generated by the project? N/A

DEP Land Use Regulation (609) 777-0454
<http://www.nj.gov/dep/landuse>

Does the project involve development at or near, or impacts to the following; describe the type and extent of development in regards to location and impacts to regulated features:

Water courses (streams) yes

State Open Waters? No

Freshwater Wetlands and/or freshwater wetland transition areas? No

Flood Hazard areas and/or riparian buffers No

Waterfront development areas No

Tidally Flowed Areas No

Bureau of Tidelands Management: http://www.nj.gov/dep/landuse/tl_main.html

The CAFRA Planning Area? <http://www.state.nj.us/dep/gis/cafralayers.htm>

DEP NATURAL AND HISTORIC RESOURCES

Green Acres Program (609) 984-0631
<http://www.nj.gov/dep/greenacres>

Does the project require a diversion of State property or parkland, lease of same, lifting of a Green Acres of Land Use deed restriction, or work within an existing easement? No Will any activity occur on State owned lands? No If so please describe. _____

Does the project require a diversion of property funded with federal Land and Water Conservation Funding? No. If so, please describe _____.

Does the project include activities that are under the jurisdiction of the Watershed Property Review Board? If so, please describe. No Has the Watershed Property Review Board made a jurisdictional determination? _____

Division of Parks and Forestry: State Park Service 609-292-2772

Is the temporary use of State lands administered by the New Jersey State Park Service required for pre-construction, construction and/or post construction activities? If so, please describe.

Division of Parks and Forestry: State Forestry Services (609) 292-2530
<http://www.nj.gov/dep/parksandforests/forest>

Forest clearing activities/No Net Loss Reforestation Act

Will construction of the project result in the clearing of ½ acres or more of forested lands owned or maintained by a State entity? _____

If so, how many acres? _____

Division of Parks and Forestry: Office of Natural Lands Management (609) 984-1339
<http://www.nj.gov/dep/parksandforests/natural/index.html>

Is the project within a State designated natural area as classified in the Natural Areas System Rules at N.J.A.C. 7:5A? No

If so, please describe. _____

State Historic Preservation Office – SHPO (609) 292-0061

<http://www.state.nj.us/dep/hpo/index.htm>

Is the site a Historic Site or district on or eligible for the State or National registry? No

Will there be impacts to buildings over 50 years old? No

Are there known or mapped archeological resources on the site? No

Dam Safety Program (609) 984-0859

<http://www.nj.gov/dep/damsafety>

Will the project involve construction, repair, or removal of a dam? No

If so, please describe _____

Fish and Wildlife (609) 292-2965

<http://www.nj.gov/dep/fgw>

Will there be any shut off or drawdown of a pond or a stream? No

Threatened and Endangered Species Program

Are there records of any Threatened and Endangered species, plant, or animal in this project area? No

Will the proposed development affect any areas identified as habitat for Threatened or Endangered Species? No

SITE REMEDIATION PROGRAM (609) 292-1250

<http://www.nj.gov/dep/srp/>

Office of Brownfield Reuse (609) 292-1251

Is the project located on or adjacent to a known or suspected contaminated site? No

<http://www.nj.gov/dep/srp/kcsnj/>

Is the project within a designated Brownfield Development Area? No

<http://www.nj.gov/dep/srp/brownfields/bda/index.html>

Has a No Further Action, Response Action Outcome, or Remedial Action Permit been issued for the entire project area? N/A

If not, what is the current status of remediation activities? N/A Please include remedial phase, media affected and contaminant(s) of concern.

Name of current SRP Case Manager or Licensed Site Remediation Professional and Preferred Identification (PI) Number N/A

Is the applicant a responsible party for contamination at the property? N/A

Is the project located on a landfill that will be redeveloped for human occupancy? No If yes, is there an approved Landfill Closure Plan? _____

Dredging and Sediment Technology (609) 292-1250

Does the project involve dredging or disposing of dredge materials? No

SOLID AND HAZARDOUS WASTE MANAGEMENT PROGRAM (609) 633-1418

<http://www.nj.gov/dep/dshw/>

Does the project receive, utilize, or transport solid or hazardous wastes? No

Will the project involve the disposing of hazardous Substances per 40 CFR part 261 and NJAC 7:26? No

Will the project include operation of a solid waste facility according to N.J.A.C. 7:26-1-et seq.? No

Is the project a solid waste facility or recycling center? N/A

Is the project included in the appropriate county Solid Waste Management Plan? N/A Explain _____

AIR QUALITY PERMITTING PROGRAM

<http://www.nj.gov/dep/aqpp>

Will activity at the site release substances into the air? No

Does the project require Air Preconstruction permits per N.J.A.C. 7:27-8.2©1? No

Will your project require Air Operating permits (N.J.A.C. 7:27--22.1)? No

Will the project result in a significant increase in emissions of any air contaminant for which the area is nonattainment with the national ambient air quality standards (all of NJ for VOC and NOx; 13 counties for fine particulates), thereby triggering the Emission Offset Rule at NJAC7:27-18? No

Will the project emit group 1 or 2 TXS toxic substances listed in NJAC 7:27-17? No

Will the project emit hazardous air pollutants above reporting thresholds in NJAC7:27 8, Appendix 1? No

Will the project result in stationary diesel engines (such as generators or pumps) or mobile diesel engines (such as bulldozers and forklifts) operating on the site? If so, which?

No

RADIATION PROTECTION AND RELEASE PREVENTION (609) 984-5636

www.state.nj.us/dep/rpp

Will the operation receive, store or dispose of radioactive materials? No

Will the operation employ any type of x-ray equipment? No

DISCHARGE PREVENTION PROGRAM (DPCC) (609) 633-0610

www.nj.gov/dep/rpp

Is this a facility as defined in N.J.A.C. 7:1E in which more than 20,000 gallons of Hazardous substances other than petroleum or greater than 200,000 gallons of petroleum are stored? No

TOXIC CATASTROPHE PREVENTION ACT (TCPA) (609) 633-0610

[HTTP://WWW.STATE.NJ.US/DEP/RPP/BRP/TCPA/INDEX.HTM](http://WWW.STATE.NJ.US/DEP/RPP/BRP/TCPA/INDEX.HTM)

Is this a facility that handles or stores greater than a threshold amount of extraordinarily hazardous substances as defined in N.J.A.C. 7:31? No

Bureau of Energy and Sustainability (609)633-0538

<http://www.nj.gov/dep/aqes/energy.html>

<http://www.nj.gov/dep/aqes/sustainability.html>

GREEN DESIGN (609) 777-4211

Have you incorporated green design features into this project? Examples of green design features may include: renewable energy, water conservation and use of low impact design for stormwater.

Yes X No _____

Will this project be certified by any of the following green building rating systems?

New Jersey Green Building Manual? _____

<http://greenmanual.rutgers.edu/>

US Green Building Council's LEED (Leadership in Energy and Environmental Design)? _____

<http://www.usgbc.org/>

ASHRAE Standard 189.1? _____

<http://www.ashare.org/publications/page/927>

National Green Building Standard ICC 700-2008? _____

<http://www.nahbgreen.org>

USEPA's ENERGY STAR? _____

http://www.energystar.gov/index.cfm?c=business.bus_index

INNOVATIVE TECHNOLOGY (609) 292-0125

Is an environmental and energy innovative technology included in this project? x Y N

Is this technology used for manufacturing alternative fuels? Y x N
- If yes, what is the non-fossil feedstock(s) used for manufacturing the fuels?
 Biomass Municipal Solid Waste Other Non-Fossil Feedstocks

-What will be the primary use of the manufactured alternative fuels?
 CHP System Micro Turbine Fuel Cells

For other innovative technology type, what is the proposed application?
x Energy Site Remediation Drinking Water Wastewater

For other innovative energy systems, what is the source of energy?
x Solar Wind Tidal/Wave Hydroelectric Geothermal

Is there independent third-party performance data for the technology? Y N

Has the technology been verified by an independent third-party entity? Y N

Is this technology in use at any other location at this time? Y N
- If yes, please provide location _____

DEP COMPLIANCE AND ENFORCEMENT

Does the applicant have outstanding DEP enforcement violations, and if so, what is the status? No _____

If yes, please identify the case, case manager, program, and phone number. _____

Does the proposed project facilitate compliance where there is a current violation or ACO? No

COMMUNITY ENGAGEMENT (609)292-2908

The Department is committed to the principles of meaningful and early community engagement in the project's approval process. The Department has representatives available who could discuss community engagement issues with you and we encourage this communication to take place at the earliest possible time.

- (a) What community groups and stakeholders have you identified that may be interested in or impacted by this project?
- (b) How have you or will you engage community and stakeholders in this project? Please supply individuals or stakeholder groups contacted or who have been identified for community engagement.
- (c) What are the potential impacts of this project on the community?
- (d) How do you intend to mitigate these potential impacts?
- (e) What are the community concerns or potential concerns about this project?

(f) How do you intend to address these concerns?

(g) As part of this project, do you plan to perform any environmental improvements in this community? If yes, describe.

Please provide the Department with an additional 1 to 2 page narrative description of the project, focusing on its function and its local/regional environmental, social, and economic benefits and impacts. Also, what sensitive receptors are present and how might they be affected by this project?

GENERAL

Is the project subject to:

Highlands Regional Master Plan – Planning or Preservation Area Yes
http://www.nj.gov/dep/highlands/highlands_map.pdf

Pinelands Comprehensive Management Plan? No
<http://www.state.nj.us/pinelands/cmp/>

D&R Canal Commission Standards No
<http://www.dandrcanal.com/drcc/maps.html>

Delaware River Basin Commission No
(609) 883-9500
<http://www.state.nj.us/drbc/>

US Army Corp of Engineers review? No

B. Pattenburg Quarry Community Solar Project Description



VANGUARD[™]
ENERGY PARTNERS, LLC



PATTENBURG QUARRY

Community Solar Project Profile

Proposed by: Alex Rivera

PATTENBURG QUARRY SOLAR

This is a fully vetted 4.99 MW DC community solar project, to be sited on 34 acres in Hunterdon County, NJ. The project is expected to produce approximately 6,720,000 kWh annually.

The site is conveniently located near residential, commercial and agricultural centers, allowing for a diverse subscriber portfolio with Low to Moderate Income possibilities.

Additionally, the project is engineered using the most current technologies and best industry practices to maximize production, reliability and cost effectiveness.

**"Quality is not an act, it is a habit."
- Aristotle**



OBJECTIVE

Seeking a long term land lease agreement with an established Community Solar Developer, who will own and operate the PV array.

The Community Solar Developer will be responsible for subscriber acquisition and management for the project life.

Vanguard Energy Partners, LLC will provide full turn key engineering, procurement and construction services on this project, with an optional long term operations and maintenance agreement.



Project Overview/Details:

Site Location:

Bethlehem Township Block 12 Lots 4 (Yearly Taxes: \$ 4,342.27)

Bethlehem Township Block 12 Lots 5 (Yearly Taxes: \$ 1,643.33)

Union Township Block 1.08 Lot 22 (Yearly Taxes: \$ 13,432.63)

Installation Type: Groundmount

System Capacity: 4.99 MW DC

Estimated Yearly Production: 6,720,00 kWh

Estimated Construction Cost: \$ 7,385,200.00

Unit Price/Watt: \$1.48

Allowances*: \$ 0.43/Watt for Solar Modules

*Owner will be responsible for any incurred costs exceeding specified allowance(s) and will likewise receive credit for any unused allocated funds.

Point of Interconnection: 2 options

(a) to the existing onsite JCP&L meter or

(b) direct grid connection to a pole located near the array

(i) PJM Queue # W4-031

(ii) Approximate upgrade costs (from 2012): \$ 293,000.00



Standard Features:

- Furnish & install solar modules, with a 25-year minimum power rated output warranty.
- Furnish & install post-driven ground mount racking with structural components fabricated from corrosion-resistant materials to protect against rust and other elements.
- Install solar modules to the ground mount racking system.
- Furnish & install string grid-connected inverters.
- Furnish & install internet-based energy monitoring system for real-time monitoring of your solar energy production.
- Install CTs, as necessary.
- Trenching and backfilling.
- Project construction in compliance with all Federal, State, and local codes, and 100% covered by Vanguard's Builder's Risk policy.
- 5-Year warranty on design & workmanship.
- Local building and electrical permit & application fees.
- Design & engineering services required for building & electrical permit applications.
- Vanguard will assist in applying for preliminary and final interconnection approval from PJM.
- All pricing is valid for thirty (30) calendar days.
- Vanguard Energy Partners will internalize limited early development milestones.
- Vanguard Energy Partners will propose maintenance services costs.

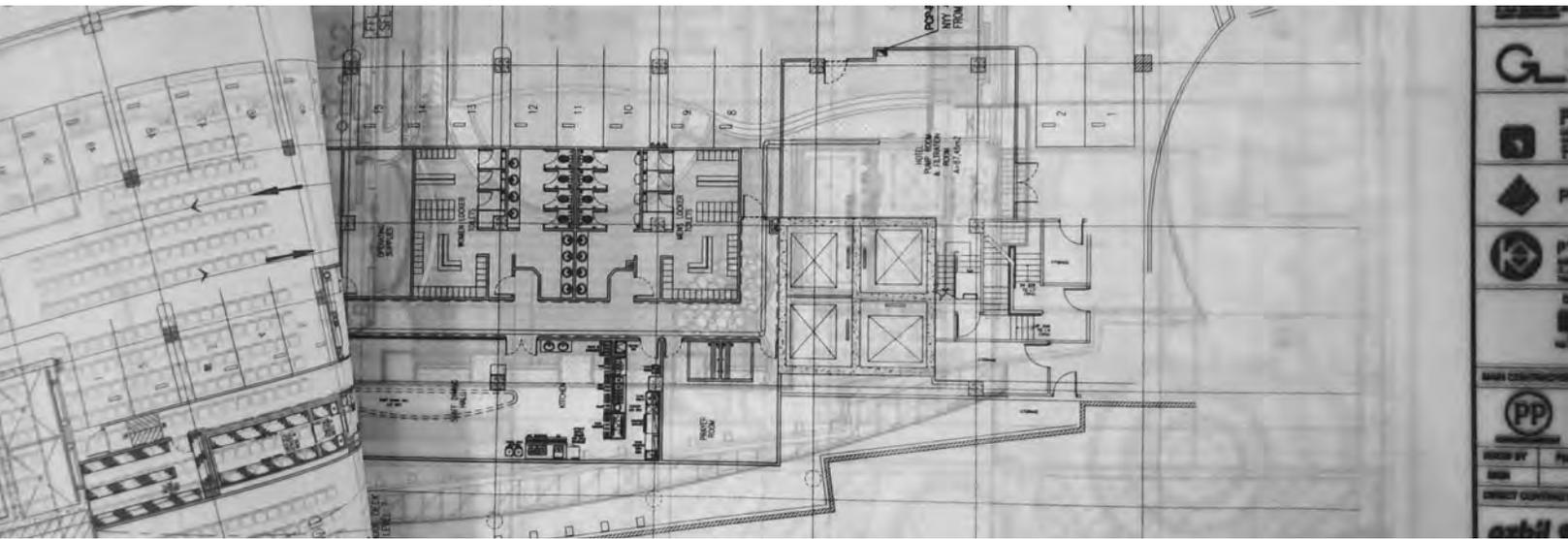


Optional Features can be Provided at an Additional Price:

- Operations and Maintenance (O&M) services offered through Vanguard EMS (Energy Maintenance Solutions)

Exclusions/Clarifications:

- Utility side upgrades.
- SCADA/utility metering.
- Ground water remediation/ detention basins.
- No grading or storm water prevention is included.
- Price is assumed 6' embedment for piles.
- Costs/fees for local utility provider testing/shutdowns required for system operation and connection to the utility grid beyond one weekend.
- Full set of engineered drawings will be needed to define firm and accurate cost of construction. Our price is based on our interpretations of what is needed per the layout and one-line drawing.



Preliminary Engineering

Design 1 Pattenburg Quarry, Mulhockaway Creek

Report

| | |
|-----------------|-------------------------------------|
| Project Name | Pattenburg Quarry |
| Project Address | Mulhockaway Creek |
| Prepared By | Peter Osowski pete@vepenergy.com |

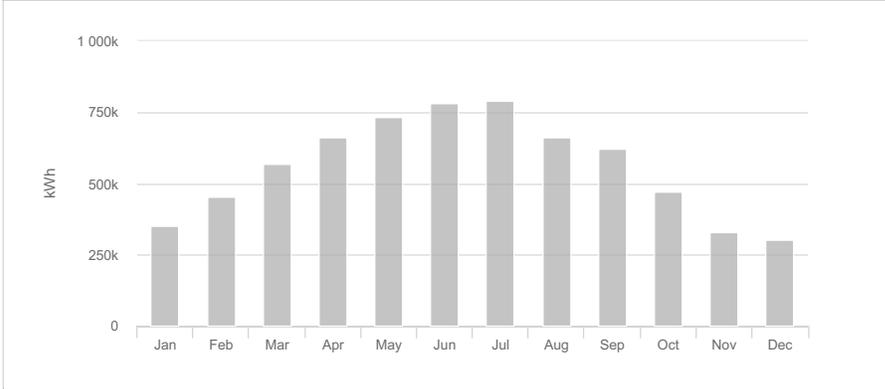
System Metrics

| | |
|-----------------------|--|
| Design | Design 1 |
| Module DC Nameplate | 4.99 MW |
| Inverter AC Nameplate | 3.88 MW Load Ratio: 1.29 |
| Annual Production | 6,720 GWh |
| Performance Ratio | 85.7% |
| kWh/kWp | 1,347.9 |
| Weather Dataset | TMY, 10km Grid (40.65,-75.05), NREL (prospector) |
| Simulator Version | 68a31560b4-3cc1846ea1-559aa8be28-df1979fd34 |

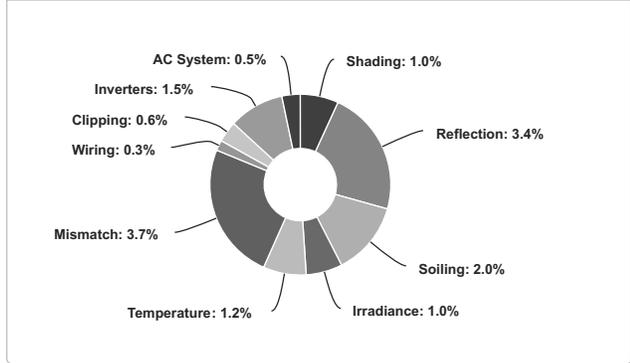
Project Location



Monthly Production



Sources of System Loss



Annual Production

| | Description | Output | % Delta |
|----------------------------------|-------------------------------------|--------------------|--------------|
| Irradiance (kWh/m ²) | Annual Global Horizontal Irradiance | 1,451.4 | |
| | POA Irradiance | 1,572.4 | 8.3% |
| | Shaded Irradiance | 1,556.0 | -1.0% |
| | Irradiance after Reflection | 1,502.7 | -3.4% |
| | Irradiance after Soiling | 1,472.6 | -2.0% |
| | Total Collector Irradiance | 1,472.6 | 0.0% |
| Energy (kWh) | Nameplate | 7,342,520.5 | |
| | Output at Irradiance Levels | 7,269,889.7 | -1.0% |
| | Output at Cell Temperature Derate | 7,184,810.4 | -1.2% |
| | Output After Mismatch | 6,916,062.1 | -3.7% |
| | Optimal DC Output | 6,896,602.9 | -0.3% |
| | Constrained DC Output | 6,857,333.8 | -0.6% |
| | Inverter Output | 6,753,900.0 | -1.5% |
| | Energy to Grid | 6,720,130.0 | -0.5% |
| Temperature Metrics | | | |
| | Avg. Operating Ambient Temp | | 12.5 °C |
| | Avg. Operating Cell Temp | | 19.9 °C |
| Simulation Metrics | | | |
| | Operating Hours | 4687 | |
| | Solved Hours | 4687 | |

Condition Set

| | | | | | | | | | | | | |
|------------------------------|--|-------|---------|-------------------|---|---|---|---|---|---|---|-----------------------|
| Description | Condition Set 1 | | | | | | | | | | | |
| Weather Dataset | TMY, 10km Grid (40.65,-75.05), NREL (prospector) | | | | | | | | | | | |
| Solar Angle Location | Meteo Lat/Lng | | | | | | | | | | | |
| Transposition Model | Perez Model | | | | | | | | | | | |
| Temperature Model | Sandia Model | | | | | | | | | | | |
| Temperature Model Parameters | Rack Type | a | b | Temperature Delta | | | | | | | | |
| | Fixed Tilt | -3.56 | -0.075 | 3°C | | | | | | | | |
| | Flush Mount | -2.81 | -0.0455 | 0°C | | | | | | | | |
| | East-West | -3.56 | -0.075 | 3°C | | | | | | | | |
| | Carport | -3.56 | -0.075 | 3°C | | | | | | | | |
| Soiling (%) | J | F | M | A | M | J | J | A | S | O | N | D |
| | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Irradiation Variance | 5% | | | | | | | | | | | |
| Cell Temperature Spread | 4° C | | | | | | | | | | | |
| Module Binning Range | -2.5% to 2.5% | | | | | | | | | | | |
| AC System Derate | 0.50% | | | | | | | | | | | |
| Module Characterizations | Module | | | | | | | | | | | Characterization |
| | Mono 380 Wp 72 Cells 1500V (RECOM-SILLIA) | | | | | | | | | | | RECOM_72M380.PAN, PAN |
| Component Characterizations | Device | | | | | | | | | | | Characterization |
| | SG 125HV (Sungrow) | | | | | | | | | | | Spec Sheet |

Components

| Component | Name | Count |
|-----------|---|--------------------|
| Inverters | SG 125HV (Sungrow) | 31 (3.88 MW) |
| Strings | 10 AWG (Copper) | 551 (133,757.1 ft) |
| Module | RECOM-SILLIA, Mono 380 Wp 72 Cells 1500V (380W) | 13,120 (4.99 MW) |

Wiring Zones

| Description | Combiner Poles | String Size | Stringing Strategy |
|-------------|----------------|-------------|--------------------|
| Wiring Zone | 12 | 23-26 | Along Racking |

Field Segments

| Description | Racking | Orientation | Tilt | Azimuth | Intrarow Spacing | Frame Size | Frames | Modules | Power |
|-----------------|------------|------------------------|------|---------|------------------|------------|--------|---------|---------|
| Field Segment 1 | Fixed Tilt | Landscape (Horizontal) | 10° | 180° | 5.2 ft | 4x4 | 631 | 10,096 | 3.84 MW |
| Field Segment 2 | Fixed Tilt | Landscape (Horizontal) | 10° | 180° | 5.2 ft | 4x4 | 189 | 3,024 | 1.15 MW |

Detailed Layout



Alex Rivera

SVP Project Development & Originations

Email: alex@vepenergy.com

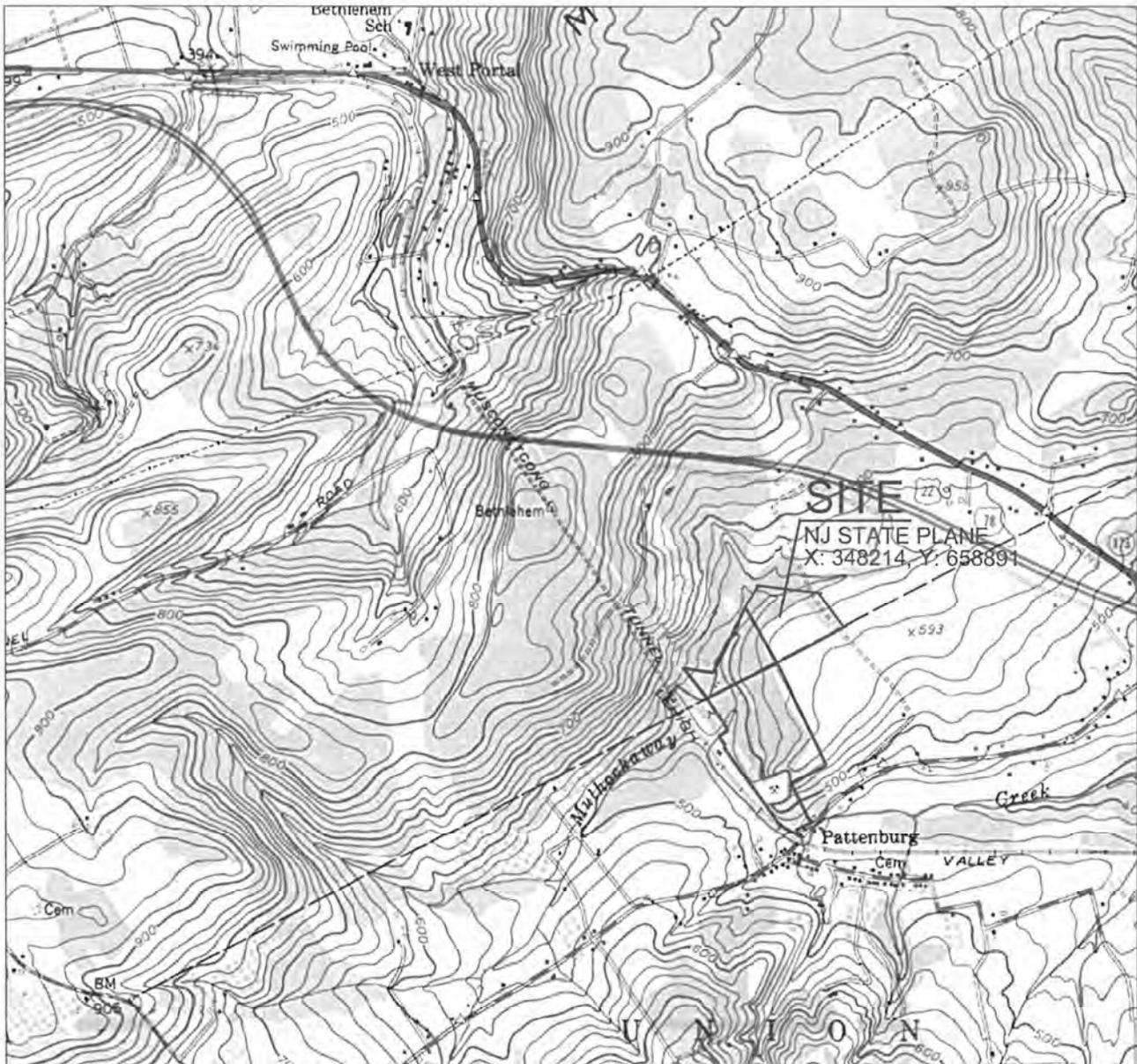
Phone: 908-534-1302

Mobile: 772-215-3626



VANGUARDTM
ENERGY PARTNERS, LLC

D. USGS Map of Pattenburg Quarry



2000 0 2000



Scale 1" = 2000 ft

SOURCE:
USGS QUAD BLOOMSBURY

TITLE:

USGS MAP

E&LP

ENGINEERING & LAND PLANNING ASSOCIATES, INC.

54 OLD HIGHWAY 22, SUITE 300 CLINTON, NJ 08809

LOCATION:

PATTENBURG QUARRY PROPERTY
455 COUNTY ROUTE 614
BLOCK 1.0B LOT 22
UNION TOWNSHIP
BLOCK 12 LOTS 5 & 6
BETHLEHEM TOWNSHIP

APPENDIX

2

DATE: 8/16/2011

PROJECT NO.: 8132

FILENAME: USGS.dwg

E. Aerial Photo of the Pattenburg Quarry

Pattensburg Ariel View



F. Site Map Including Known Environmental Features.

Printed Program at 1-800-638-6620.



MAP SCALE 1" = 500'



NFIP

PANEL 0094F

FIRM

FLOOD INSURANCE RATE MAP
HUNTERDON COUNTY,
NEW JERSEY
ALL JURISDICTIONS

PANEL 94 OF 426
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY: BETHLEHEM TOWNSHIP OF UNION, TOWNSHIP OF

NUMBER: 340554

PANEL SUFFIX: 004

F: 004

F: 004

Notice to User: The Map Number shown below should be used when placing map orders. The Community Number shown above should be used on insurance applications for the subject community.



MAP NUMBER
34019C0094F

EFFECTIVE DATE
SEPTEMBER 25, 2009

Federal Emergency Management Agency

NATIONAL FLOOD INSURANCE PROGRAM

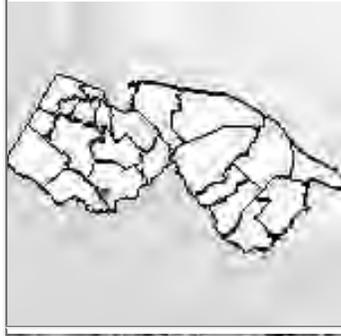
This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov



New Jersey Map



IC| NJDEP
NJDEP makes no representations of any kind, including, but not limited to, the warranties of merchantability or fitness for a particular use, nor are any such warranties to be implied with respect to the digital data layers on this map. All scales noted are approximate.



Scale 1:6872

Landscape Project

2.1 - Forest

-  Suitable Habitat
-  Priority Concern
-  State Threatened
-  State Endangered
-  Federal T & E
-  Aerial Photos 2002
-  Mid-Atlantic States
-  New Jersey
-  Other States

New Jersey Map



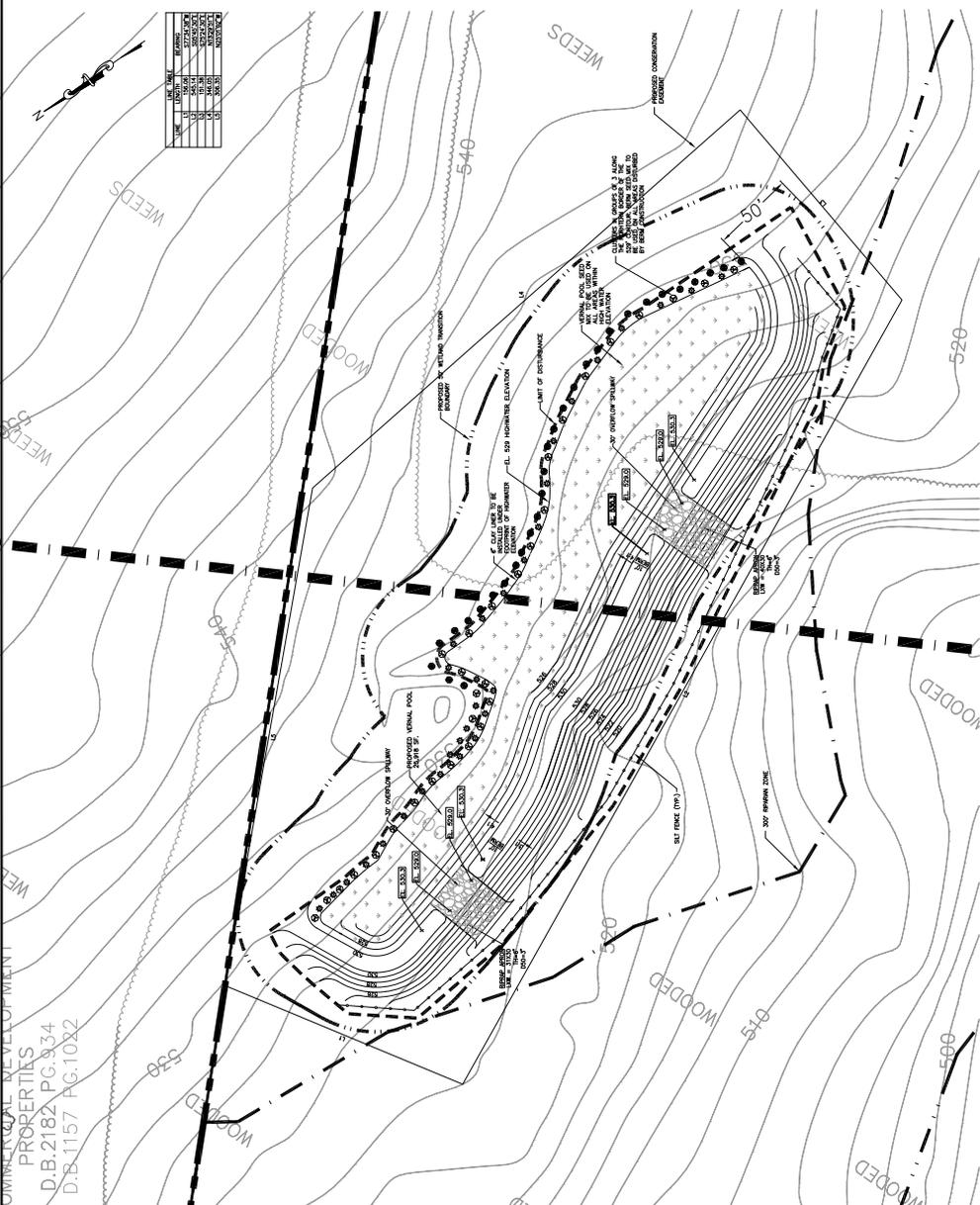
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- Category One Waters
- Landscape Project 2,1 - Emergent Wetlands
- Suitable Habitat
- Priority Concern
- State Threatened
- State Endangered
- Federal T & E
- Landscape Project 2,1 - Forested Wetlands
- Suitable Habitat
- Priority Concern
- State Threatened
- State Endangered
- Federal T & E
- Aerial Photos 2002
- Mid-Atlantic States
- New Jersey
- Other States



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COMMERCIAL DEVELOPMENT
 PROPERTIES
 D.B.2182, PG.3/4
 D.B.1157, PG.10X2



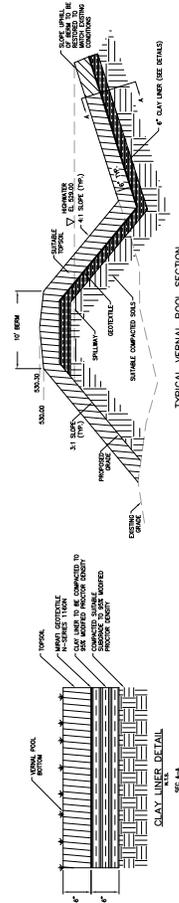
| LEGEND | SPECIES | SPACING | QUANTITY | CONDITION |
|--------|---|--|----------|---------------------|
| ☉ | SILKY DOGWOOD <i>Cornus amomifolia</i> | CLUSTER IN NORTHERN EDGE OF POOL (53' CONTOUR) AND ABOVE | 30 | 18-24" #3 CONTAINER |
| ● | SMOOTH ALDER <i>Alnus incana</i> | CLUSTER IN NORTHERN EDGE OF POOL (53' CONTOUR) AND ABOVE | 30 | 18-24" #3 CONTAINER |
| ⊗ | PUSSY WILLOW <i>Salix humilis</i> | CLUSTER IN NORTHERN EDGE OF POOL (53' CONTOUR) AND ABOVE | 30 | 18-24" #3 CONTAINER |

NOTES:
 1. REMOVE WOODY DEBRIS AFTER SITE CLEARING. AFTER SEEDING/MULCHING WITHIN THE POOL AREA, HAND SPREAD WOODY DEBRIS WITHIN AND ADJACENT TO THE POOL TO PROVIDE PLACES FOR EGG LAYING AND ESCAPE COVER.
 2. MAINTENANCE INSPECTION AND FOLLOW-UP WILL BE REQUIRED TO CONTROL INVASIVE SPECIES AND REPLANT, IF NECESSARY, FOR THE FIRST GROWING SEASON. THE AREA SHOULD BE INSPECTED 1/MONTH FROM MAY THROUGH SEPTEMBER FOR THE FOLLOWING 4 YEARS. THE AREA SHOULD BE INSPECTED TWICE YEARLY IN EARLY AND LATE SUMMER. SEED MIX TO BE USED ON ALL AREAS DISTURBED BY BERM CONSTRUCTION.
 3. PERCENT OF MIX:
 ANNUAL RYEGRASS 20%
 CANADA WILD RYE 16%
 SWITCHGRASS, 'SHELTER' 10%
 PURPLE TOP 8%
 LANCE LEAVED COREOPSIS 5%
 VIRGINIA WILD RYE 4%
 TALL WHITE BEARDTONGUE 4%
 WILD BERGAMOT 2%
 NOTES:
 -THE MIX IS APPLIED AT A RATE OF 30 LB/ACRE OR 1 LB/1000 SQ. FT.
 -USE A HARROW TO RAKE THE SEED INTO THE TOP 0.5 INCHES OF SOIL.
 -COVER WITH STRAW MULCH AT ONE TON PER ACRE.
 VERNAL POOL SEED MIX TO BE USED ON ALL AREAS WITHIN HIGH WATER ELEVATION.
 SPECIES:
 FOX SEDGE 23%
 GRANT SEDGE 10%
 FRINGED SEDGE 5%
 SHALLOW SEDGE 5%
 SOFT RUSH 5%
 EASTERN BURREED 5%
 BLUNT BROOM SEDGE 4%
 BLUE VERVAIN 3%
 BRISTLY SEDGE 2%
 RATTLESNAKE GRASS 1%
 RICE CUTGRASS 1%

VERNAL HABITAT CONSTRUCTION NOTES:
 1) PROPOSED VERNAL HABITAT TO BE FULLY CONSTRUCTED PRIOR TO FILLING OF EXISTING HABITAT.
 2) BERM SHALL BE CONSTRUCTED OF SUITABLE FILL MATERIAL TO ALLOW FOR PROPER COMPACTION.
 3) TOPSOIL TO BE PLACED OVER CLAY LINER SHALL BE COMPOSED OF 50% MINERAL AND 50% ORGANIC MATERIAL.

VERNAL POOL
 SCALE: 1" = 30'

| PROPERTY | CLAY LINER SPECIFICATIONS | UNIT | QUANTITY |
|-------------------|---------------------------|---------------|---------------|
| 1. 10' BERM | 1. 10' BERM | 10' BERM | 10' BERM |
| 2. 3" TOPSOIL | 2. 3" TOPSOIL | 3" TOPSOIL | 3" TOPSOIL |
| 3. 1" CLAY LINER | 3. 1" CLAY LINER | 1" CLAY LINER | 1" CLAY LINER |
| 4. 1" CLAY LINER | 4. 1" CLAY LINER | 1" CLAY LINER | 1" CLAY LINER |
| 5. 1" CLAY LINER | 5. 1" CLAY LINER | 1" CLAY LINER | 1" CLAY LINER |
| 6. 1" CLAY LINER | 6. 1" CLAY LINER | 1" CLAY LINER | 1" CLAY LINER |
| 7. 1" CLAY LINER | 7. 1" CLAY LINER | 1" CLAY LINER | 1" CLAY LINER |
| 8. 1" CLAY LINER | 8. 1" CLAY LINER | 1" CLAY LINER | 1" CLAY LINER |
| 9. 1" CLAY LINER | 9. 1" CLAY LINER | 1" CLAY LINER | 1" CLAY LINER |
| 10. 1" CLAY LINER | 10. 1" CLAY LINER | 1" CLAY LINER | 1" CLAY LINER |



- VERNAL HABITAT SEQUENCE OF CONSTRUCTION
1. INSTALLATION OF SILT FENCE. 2 DAYS
 2. SITE CLEARING WITHIN LIMITS OF PROPOSED BERM AND PROPOSED VERNAL POOL. 1 WEEK
 3. BERM CONSTRUCTION. 2 WEEKS
 4. INSTALLATION OF CLAY LINER. 2 WEEKS
 5. FINAL GRADING. 2 DAYS
 6. INSTALLATION OF VERNAL POOL PLANTINGS. 3 DAYS
 7. TOPSOIL, SEED, MULCH OF ALL DISTURBED AREAS. 1 WEEK
 8. REMOVAL OF SILT FENCE. 1 DAY
- AREA OF DISTURBANCE = 1.38 ACRES

Blanchard & Lee Planning
 A PROFESSIONAL ASSOCIATION

41 OLD HIGHWAY 22, SUITE 300, CLINTON, NJ 08809

| NO. | REVISION | BY | DATE |
|-----|----------|----|------|
| | | | |
| | | | |
| | | | |

DATE: JAMES A. CAMERON, P.E.
 PROJECT: COUNTY ROUTE 614
 BLOCK 108 LOT 22
 BLOCK 12 LOTS 5 & 6
 BETHLEHEM TOWNSHIP
 HUNTERDON COUNTY NEW JERSEY

JOB NO.: 8132
 SCALE: AS SHOWN
 DRAWN: GEL
 CHECKED: JJC
 DATE: 9/29/11

VERNAL MITIGATION DETAIL

G. Site Plans of the Project.



H. Street Map of the Pattenburg Quarry Project Site



Google

© 2008

Eye alt: 7245 ft

Data SIO, NOAA, U.S. Navy, NGA, GEBCO
Image USDA, Farm Service Agency
© 2011 Google

Pattenburg Quarry Entrance

40°38'29.20" N 75°00'21.74" W

Shannon Donnelly

From: Foster, Ruth <Ruth.Foster@dep.nj.gov>
Sent: Wednesday, September 4, 2019 6:18 PM
To: Hill, Erin; Bruder, Steven; Appelget, Kevin; Davis, Kelly; Jones, Christopher; Corleto, Joseph; Baratta, Meghan
Cc: Shannon Donnelly; Foster, Ruth; Brunatti, Megan; Nolan, Katherine
Subject: 090419 Bethlehem Solar Pattenburg Quarry Community Solar NJDEP comments

The NJDEP offers the following comments on the Bethlehem Pattenburg Quarry Community Solar project:

TO: Mr. Gerald Donovan
Vanguard Energy Partners
2 Commerce Street
Branchburg, NJ 08876

RE: Bethlehem Pattenburg Quarry Community Solar Project
455 Route 614, Block 12, Lot 4, 5, 22
Bethlehem, Hunterdon County

The Office of Permit Coordination and Environmental Review (PCER) distributed the project information to various programs within the Department for the proposed 4.99 MW Community Solar project proposed for the above address. Below are preliminary comments of possible permits and action items this project may require (but not limited to) based on the information that was submitted on August 12 2019: *** this is neither a comprehensive nor a technical summary ***

Land Use : Christopher Jones – Christopher.Jones@dep.nj.gov and 609-633-6757

Based on the information provided and a GIS review, it is recommended that a flood hazard area jurisdictional determination be completed to confirm flood hazard area as well as a wetlands delineation to confirm absence of regulated wetlands. It appears that there are no freshwater wetlands at the site but there are flood hazard jurisdictional areas adjacent to the proposed array site but the array site may be outside the 300 foot buffer of the stream. Any regulated activities within freshwater wetlands, State open waters, and/or transition areas would require approvals pursuant to the Freshwater Protection Act Rules (N.J.A.C. 7:7A). In addition, the Division has determined that there is a flood hazard area and 300-foot riparian zone on the proposed site. Any regulated activities within a flood hazard area and riparian zone would require approvals pursuant to the Flood Hazard Area Control Act Rules (N.J.A.C. 7:13).

Please contact Chris Jones for additional regulatory guidance.

Fish and Wildlife: Kelly Davis: Kelly.Davis@dep.nj.gov at (908) 236-2118 or or Joseph.Corleto@dep.nj.us at (609) 292-9451

The DFW has completed its review of the proposed Pattenburg Community Solar project at 455 Route 614 in Bethlehem Township, Hunterdon County and offer the following comments.

According to Landscapes project 3.3 it appears the majority of the 3 parcels is valued at R4 and R5 for a variety of Federal and State Listed Threatened species. Based upon the mapping submitted by the applicant it appears there is a portion of open field where some of the solar panels will be installed, however, the remaining parcels look to be wooded.

The DFW relies on the NJDEP Office of Natural Lands Management, Natural Heritage Program (NHP) for location and protective comment on floral threatened and endangered species. The DFW did not see any documentation within the proposal the applicant contacted the NHP for a complete list of the threatened and endangered species within the project vicinity. Without this information our review would be incomplete.

The applicant did not provide specific information about how many trees they plan to remove or how they planned to minimize their impacts. Therefore, the DFW would require additional consultation with the applicant and the NJ Endangered Non-game Species Program before installing the solar panels.

Additionally, the Pattenburg project is within 1/4 mile of a Northern Long-eared Bat Hibernaculum and would require USFWS consultation.

If you have any questions regarding the comments please feel free to contact me at (609) 292-9451 or at Joseph.Corleto@dep.nj.us.

State Historic Preservation Office: Vincent Maresca at Vincent.maresca@dep.nj.gov and (609) 633-2395 or Jesse West-Rosenthal: Jesse.West-Rosenthal@dep.nj.gov at (609) 984-6019r

HPO Project # 19-2768-1
HPO-H2019-222

Thank you for providing Historic Preservation Office (HPO) with the opportunity to review and comment on the potential for the above-referenced project to affect historic and archaeological resources. Based upon the documentation submitted, the proposed project is located adjacent to the Lehigh Valley Railroad Historic District, which was determined eligible for listing in the New Jersey and National Registers of Historic Places on March 15, 2002. In addition, the proposed project is located in an area exhibiting a high potential for the presence of archaeological resources. The project's topographic setting, a well-drained landform adjacent to a tributary of Mulhockaway Creek, is consistent with current archaeological models for locations containing Native American archaeological deposits. In addition, the subject property includes a previously identified archaeological site. As a result, the subject property exhibits a high sensitivity for the presence of Native American and possible historic-period archaeological resources.

If future project activities require any federal funding, licensing, or permitting, Freshwater Wetlands permits, Waterfront Development permits, and/or Upland Development permits issued by the State of New Jersey's Division of Land Use Regulation, as well as environmental assessments under Executive Order 215, further consultation with the HPO will be necessary and archaeological and architectural survey may be appropriate.

If additional consultation with the HPO is needed for this undertaking, please reference the HPO project number 19-2768 in any future calls, emails, submissions or written correspondence to help expedite your review and response.

Bureau of Energy and Sustainability (Solar): Erin Hill: Erin.Hill@dep.nj.gov or (609) 633-1120

- The Community Solar Energy Pilot Program Application window opened April 9, 2019 and closes September 9, 2019 <https://www.bpu.state.nj.us/bpu/pdf/boardorders/2019/20190329/8E%20-%20Community%20Solar%20Energy%20Pilot%20Program%20Application%20Form.pdf>
- The proposed array is located on Urban Lands & Managed Wetland in Maintained Lawn Greenspace which are identified as “indeterminate” per the Solar Siting Analysis.
- Visit the BES solar siting webpage & NJ Community Solar Siting Tool <https://www.state.nj.us/dep/ages/solar-siting.html>

Stormwater: Eleanor Krukowski (Eleanor.Krukowski@dep.nj.gov)

- Construction projects that disturb 1 acre or more of land, or less than 1 acre but are part of a larger common plan of development that is greater than 1 acre, are required to obtain coverage under the Stormwater construction general permit (5G3). Applicants must first obtain certification of their soil erosion and sediment control plan (251 plan) from their local soil conservation district office. Upon certification, the district office will provide the applicant with two codes process (SCD certification code and 251 identification code) for use in the DEPonline portal system application. Applicants must then become a registered user for the DEPonline system and complete the application for the Stormwater Construction General Authorization. Upon completion of the application the applicant will receive a temporary authorization which can be used to start construction immediately, if necessary. Within 3-5 business days the permittee contact identified in the application will receive an email including the application summary and final authorization.

Department of Agriculture: Steven Bruder at (609) 984-2504

This parcel is not within the Hunterdon County Agricultural Development Area and is not its target list for preservation. We would therefore not oppose the solar application.

Steven M. Bruder PP, AICP
 New Jersey State Agriculture Development Committee
 New Jersey State Transfer of Development Rights Bank
 369 South Warren Street, 2nd Floor, Room 202
 PO Box 330
 Trenton, New Jersey 08625
 Phone: [609-984-2504](tel:609-984-2504)
 Fax: [609-633-2004](tel:609-633-2004)

Thank you again for this opportunity to comment on the project. Should circumstances or conditions be or become other than as set forth in the information that was recently provided to the NJDEP, the comments and regulatory requirements provided above are subject to change and may no longer hold true. Statements made within this email are not indicative that the NJDEP has made any decisions on whether the proposed project will be permitted.

Please review the comments that were provided. If you would like to work with the programs directly, we just ask that you keep Permit Coordination copied on any correspondence so we may update our records. [This](#)

email shall serve to satisfy the Community Solar application requirement that the Applicant has met with PCER.

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

Ruth

Ruth W. Foster, PhD., P.G., Director
New Jersey Department of Environmental Protection
Office of Permit Coordination and Environmental Review
Mail Code 401-07J
401 East State Street – PO Box 420
Trenton, NJ 08625
Office # 609-292-3600
Fax # 609-292-1921
Ruth.Foster@dep.nj.gov

From: Foster, Ruth <Ruth.Foster@dep.nj.gov>
Sent: Monday, August 12, 2019 4:45 PM
To: Hill, Erin <Erin.Hill@dep.nj.gov>; Bruder, Steven <Steven.Bruder@ag.nj.gov>; Foster, Ruth <Ruth.Foster@dep.nj.gov>; Appelget, Kevin <Kevin.Appelget@dep.nj.gov>; Davis, Kelly <Kelly.Davis@dep.nj.gov>; Jones, Christopher <Christopher.Jones@dep.nj.gov>; Corleto, Joseph <Joseph.Corleto@dep.nj.gov>; Baratta, Meghan <Meghan.Baratta@dep.nj.gov>
Subject: Bethlehem Solar Pattenburg Quarry Readiness Checklist

From: Foster, Ruth
Sent: Monday, August 12, 2019 4:11 PM
To: Gerald Donovan <gdonovan@vepenergy.com>
Cc: Alex Rivera <alex@vepenergy.com>; Shannon Donnelly <sdonnelly@vepenergy.com>
Subject: RE: Pattenburg Quarry Readiness Checklist

To All;

LU: Chris Jones
SHPO: Meghan Baratta
F&W: Kelly Davis, Joseph Corleto
Stormwater: (cc: Eleanor Krukowski-PCER will use boiler plate language)
BES: Erin Hill
Green Acres – Jessica Patterson
Dept of Agriculture – Steven Bruder

The Office of Permit Coordination and Environmental Review has received a permit readiness checklist for the proposed Bethlehem Route 614 Pattenburg Quarry Community Solar project in Bethlehem Township, Hunterdon County, New Jersey.

Site Location:

455 Route 614
Block 12, Lots 4,5,22
Bethlehem twp., Hunterdon County

The applicant proposes to develop and construct a 4.99 MW Community Solar Array at the above address. Please review the project information and provide your program comments to me via email by **Friday August 30, 2019**

Thanks for the help

Ruth

Ruth W. Foster, PhD., P.G., Director
New Jersey Department of Environmental Protection
Office of Permit Coordination and Environmental Review
Mail Code 401-07J
401 East State Street – PO Box 420
Trenton, NJ 08625
Office # 609-292-3600
Fax # 609-292-1921
Ruth.Foster@dep.nj.gov

From: Gerald Donovan <gdonovan@vepenergy.com>
Sent: Friday, August 9, 2019 3:59 PM
To: Foster, Ruth <Ruth.Foster@dep.nj.gov>; Brunatti, Megan <Megan.Brunatti@dep.nj.gov>
Cc: Alex Rivera <alex@vepenergy.com>; Shannon Donnelly <sdonnelly@vepenergy.com>
Subject: [EXTERNAL] Pattenburg Quarry Readiness Checklist

Dear Ms. Foster and Ms. Brunatti,

Please see the enclosed Readiness Checklist for the Pattenburg Quarry Community Solar project.

If you have any questions please contact me or Shannon Donnelly at 908-534-1302 or sdonnelly@vepenergy.com.

Thank you

Gerald Donovan

SALES CONSULTANT



VANGUARD™
ENERGY PARTNERS, LLC

CORPORATE OFFICE: TWO COMMERCE STREET, BRANCBURG, NJ 08876 USA
O: 908.534.7459 C: 908 297 0710

gdonovan@vepenergy.com

www.vanguardenergypartners.com

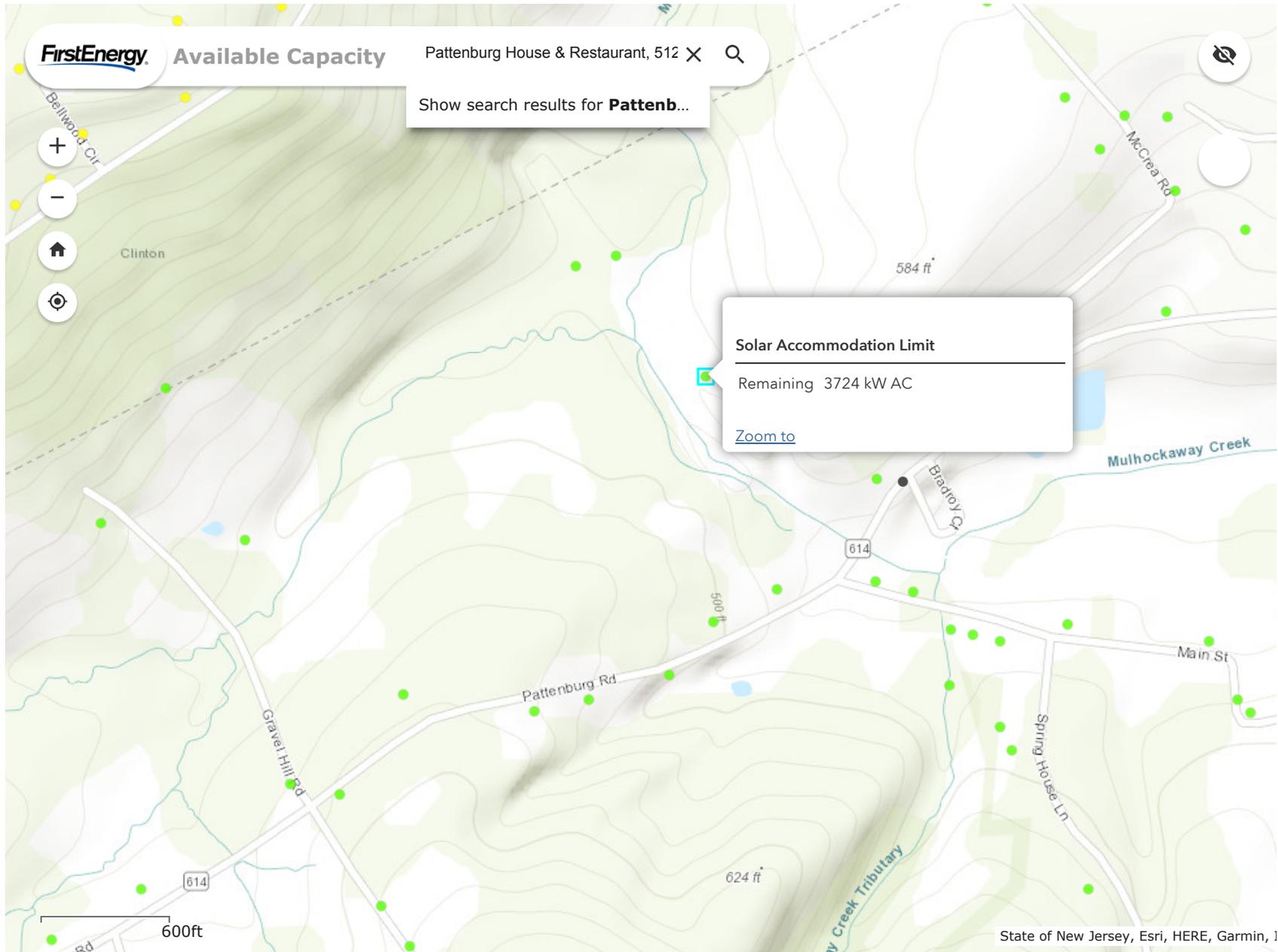
BRANCHBURG, NJ • BROOKLYN, NY • STUART, FL

 PLEASE CONSIDER THE ENVIRONMENT BEFORE PRINTING THIS E-MAIL

Pattenburg Quarry JCP&L Capacity Hosting Map

9/4/2019

Available Capacity



TO (Owner) :
Vanguard Energy Partners, LLC.

PROJECT :
Pattensburg Quarry
 4985.600 KW DC

APPLICATION NO.: BASE
PERIOD FROM :
PERIOD TO :
PROJECT NOS.: 19-005
CONTRACT DATE: TBD

Distribution to :
 OWNER
 CONTRACTOR

FROM (Contractor) :
 Vanguard Energy Partners, LLC.
 1 Commerce Street, Branchburg, NJ 08876

EXHIBIT *

VEP Req.# BASE

CONTRACT FOR :

CONTRACTOR'S APPLICATION FOR PAYMENT

Application is made for payment, as shown below, in connection with the Contract.
 Continuation Sheet, AIA Document G703, is attached.

| | |
|---|------------------------|
| 1 ORIGINAL CONTRACT SUM | \$ 7,202,117.00 |
| 2 Net change by Change Orders | \$ 0.00 |
| 3 CONTRACT SUM TO DATE (LINE 1+2) | \$ 7,202,117.00 |
| 4 TOTAL COMPLETED AND STORED TO DATE | \$ - |
| (Column G on G703) | |
| 5 RETAINAGE : of Contract Value | |
| a. <u>0.00%</u> of Completed Work | \$ 0.00 |
| (Columns D + E on G703) | |
| b. _____ of Stored Materials | \$ 0.00 |
| (Column F on G703) | |
| Total Retainage (Line 5a + b or | |
| Total in Column I on G703) | |
| | \$ 0.00 |
| 6 TOTAL EARNED LESS RETAINAGE | \$ 0.00 |
| (Line 4 less Line 5 Total) | |
| 7 LESS PREVIOUS CERTIFICATES FOR PAYMENT | |
| (Line 6 from prior Certificate) | \$ 0.00 |
| 8 CURRENT PAYMENT DUE | \$ 0.00 |
| 9 BALANCE TO FINISH, INCLUDING RETAINAGE | |
| (Line 3 less Line 6) | \$ 7,202,117.00 |

The undersigned Contractor certifies that to the best of the Contractor's knowledge, information and belief the Work covered by this Application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by the Contractor for Work for which previous Certificates for Payment were issued and payments received from the Owner, and that the current payment shown herein is now due.

CONTRACTOR : Vanguard Energy Partners, LLC

By : _____ Date : _____

State of :
 County of:

Subscribed and sworn to before
 me this _____ day of _____

AFFIX
SEAL

Notary Public :
 My Commission expires :

OWNER'S CERTIFICATE FOR PAYMENT

In accordance with the Contract Documents, based on on-site observations and the data comprising this application, the Owner certifies that to the best of the Owner's knowledge, information and belief the Work has progressed as indicated, the quality of the work is in accordance with the Contract Documents, and the Contractor is entitled to payment of the AMOUNT CERTIFIED.

AMOUNT CERTIFIED\$ _____

(Attach explanation if the amount certified differs from the amount applied for. Initial all figures on this Application and on the Continuation Sheet that are changed to conform to the amount certified).

Owner :

By : _____ Date : _____

This Certificate is not negotiable. The AMOUNT CERTIFIED is payable only to the Contractor named herein. Issuance, payment and acceptance of payment are without prejudice to any rights of the Owner or Contractor under this Contract.

| CHANGE ORDER SUMMARY | ADDITIONS | DEDUCTIONS |
|--|-------------|-------------|
| Total changed approved in previous months by Owner | | |
| Total approved this Month | | |
| | \$ - | \$ - |
| NET CHANGES by Change Order | \$ - | \$ - |

CONTINUATION SHEET

AIA DOCUMENT G703

AIA Document G702, APPLICATION AND CERTIFICATE FOR PAYMENT, containing Contractor's signed Certification is attached.

In tabulations below, amounts are stated to the nearest dollar.

Use Column I on Contracts where variable retainage for items may apply.

**Pattensburg Quarry
EXHIBIT ***APPLICATION NO. : **BASE**

PERIOD FROM :

PERIOD TO :

ARCHITECT'S PROJECT NO. : **19-005**

VEP Req.#

| A ITEM NO. | B DESCRIPTION OF WORK | C SCHEDULED VALUE | D WORK COMPLETED | | F MATERIALS PRESENTLY STORED (NOT IN D OR E) | G TOTAL COMPLETED AND STORED TO DATE (D + E + F) | H % (G / C) | I BALANCE TO FINISH (C - G) |
|------------------|--------------------------|-------------------------|---|-------------|---|---|-------------------|---|
| | | | FROM PREVIOUS APPLICATION (D + E) | THIS PERIOD | | | | |
| 1 | Equipment Procurement | \$ 3,163,415.00 | \$ - | \$ - | \$ - | \$ - | 0.0% | \$ 3,163,415.00 |
| 2 | Labor & Subcontractors | \$ 2,473,738.00 | \$ - | \$ - | \$ - | \$ - | 0.0% | \$ 2,473,738.00 |
| 3 | General Conditions | \$ 1,368,608.00 | \$ - | \$ - | \$ - | \$ - | 0.0% | \$ 1,368,608.00 |
| 4 | Engineering | \$ 196,356.00 | \$ - | \$ - | \$ - | \$ - | 0.0% | \$ 196,356.00 |
| | Grand Totals | \$ 7,202,117.00 | \$ - | \$ - | \$ - | \$ - | 0.00% | \$ 7,202,117.00 |

CONTINUATION SHEET

AIA DOCUMENT G703

AIA Document G702, APPLICATION AND CERTIFICATE FOR PAYMENT, containing Contractor's signed Certification is attached. In tabulations below, amounts are stated to the nearest dollar. Use Column I on Contracts where variable retainage for items may apply.

**Change Orders
EXHIBIT ***

APPLICATION NO. : **BASE**
PERIOD FROM :
PERIOD TO :
ARCHITECT'S PROJECT NO. : **19-005**

VEP Req.# **BASE**

| A ITEM NO. | B DESCRIPTION OF WORK | C SCHEDULED VALUE | D WORK COMPLETED | | F MATERIALS PRESENTLY STORED (NOT IN D O R E) | G TOTAL COMPLETED AND STORED TO DATE (D + E + F) | H % (G / C) | I BALANCE TO FINISH (C - G) | J 0.0% RETAINAGE |
|---------------|--------------------------|----------------------|--|------------------|--|---|----------------|--------------------------------|---------------------|
| | | | D FROM PREVIOUS APPLICATION (D + E) | E THIS PERIOD | | | | | |
| | CO# | \$ - | \$ - | \$ - | \$ - | \$ - | #DIV/0! | \$ - | \$ - |
| | | \$ - | \$ - | \$ - | \$ - | \$ - | #DIV/0! | \$ - | \$ - |
| | | \$ - | \$ - | \$ - | \$ - | \$ - | #DIV/0! | \$ - | \$ - |
| | | \$ - | \$ - | \$ - | \$ - | \$ - | #DIV/0! | \$ - | \$ - |
| | | \$ - | \$ - | \$ - | \$ - | \$ - | #DIV/0! | \$ - | \$ - |
| | | \$ - | \$ - | \$ - | \$ - | \$ - | #DIV/0! | \$ - | \$ - |
| | | \$ - | \$ - | \$ - | \$ - | \$ - | #DIV/0! | \$ - | \$ - |
| | Grand Totals | \$ - | \$ - | \$ - | \$ - | \$ - | #DIV/0! | \$ - | \$ - |

Section C: Certifications

Instructions: Original signatures on all certifications are required. All certifications in this section must be notarized.

Applicant Certification

The undersigned warrants, certifies, and represents that:

- 1) I, Shannon Donnelly (name) am the Director of Regulatory Affairs (title) of the Applicant Vanguard Energy Partners, LLC (name) and have been authorized to file this Applicant Certification on behalf of my organization; and
- 2) The information provided in this Application package has been personally examined, is true, accurate, complete, and correct to the best of the undersigned's knowledge, based on personal knowledge or on inquiry of individuals with such knowledge; and
- 3) The community solar facility proposed in the Application will be constructed, installed, and operated as described in the Application and in accordance with all Board rules and applicable laws; and
- 4) The system proposed in the Application will be constructed, installed, and operated in accordance with all Board policies and procedures for the SREC Registration Program or subsequent revision to the SREC Registration Program, if applicable; and
- 5) My organization understands that certain information in this Application is subject to disclosure under the Open Public Records Act, N.J.S.A. 47-1A-1 et seq., and that sensitive and trade secret information that they wish to keep confidential should be submitted in accordance with the confidentiality procedures set forth in N.J.A.C. 14:1-12.3.; and
- 6) My organization acknowledges that **submission of false information may be grounds for denial of this Application, and if any of the foregoing statements are willfully false, they are subject to punishment to the full extent of the law, including the possibility of fine and imprisonment.**

Signature: _____

Date: 9/3/2019

Print Name: Shannon Donnelly

Title: Director of Regulatory Affairs

Company: Vanguard Energy Partners, LLC

Signed and sworn to before me on this 3rd day of September, 2019

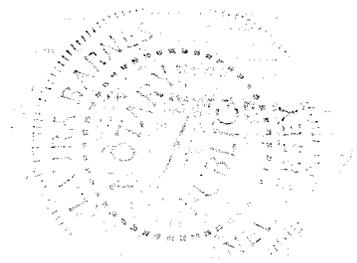
Laura Barnes

Signature _____

Laura Barnes

Name

LAURA BARNES
NOTARY PUBLIC OF NEW JERSEY
Comm. # 50072580
My Commission Expires 11/27/2022

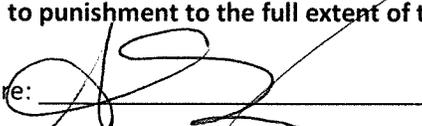


Project Developer Certification

This Certification "Project Developer / Installer" is optional if: 1) the Applicant is a government entity (municipal, county, or state), AND 2) the community solar developer will be selected by the Applicant via a Request for Proposals (RFP), Request for Quotations (RFQ), or other bidding process. In all other cases, this Certification is required.

The undersigned warrants, certifies, and represents that:

- 1) I, Shannon Donnelly (name) am the Director of Regulatory Affairs (title) of the Project Developer Vanguard Energy Partners, LLC (name) and have been authorized to file this Applicant Certification on behalf of my organization; and
- 2) The information provided in this Application package has been personally examined, is true, accurate, complete, and correct to the best of the undersigned's knowledge, based on personal knowledge or on inquiry of individuals with such knowledge; and
- 3) The community solar facility proposed in the Application will be constructed, installed, and operated as described in the Application and in accordance with all Board rules and applicable laws; and
- 4) The system proposed in the Application will be constructed, installed, and operated in accordance with all Board policies and procedures for the SREC Registration Program or subsequent revision to the SREC Registration Program, if applicable; and
- 5) My organization understands that certain information in this Application is subject to disclosure under the Open Public Records Act, N.J.S.A. 47-1A-1 et seq., and that sensitive and trade secret information that they wish to keep confidential should be submitted in accordance with the confidentiality procedures set forth in N.J.A.C. 14:1-12.3.; and
- 6) My organization acknowledges that **submission of false information may be grounds for denial of this Application, and if any of the foregoing statements are willfully false, they are subject to punishment to the full extent of the law, including the possibility of fine and imprisonment.**

Signature: 

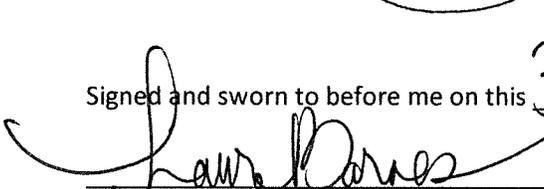
Date: 9/3/2019

Print Name: Shannon Donnelly

Title: Director of Regulatory Affairs

Company: Vanguard Energy Partners, LLC

Signed and sworn to before me on this 3rd day of September 2019



Signature 

Name Laura Barnes

LAURA BARNES
NOTARY PUBLIC OF NEW JERSEY
Comm. # 50072580
My Commission Expires 11/27/2022





Project Owner Certification

The undersigned warrants, certifies, and represents that:

- 1) I, Garrett Lesner (name) am the Manager - Business Development (title) of the Project Owner NJ Clean Energy Ventures (name) and have been authorized to file this Applicant Certification on behalf of my organization; and
- 2) The information provided in this Application package has been personally examined, is true, accurate, complete, and correct to the best of the undersigned's knowledge, based on personal knowledge or on inquiry of individuals with such knowledge; and
- 3) The community solar facility proposed in the Application will be constructed, installed, and operated as described in the Application and in accordance with all Board rules and applicable laws; and
- 4) The system proposed in the Application will be constructed, installed, and operated in accordance with all Board policies and procedures for the SREC Registration Program or subsequent revision to the SREC Registration Program, if applicable; and
- 5) My organization understands that certain information in this Application is subject to disclosure under the Open Public Records Act, N.J.S.A. 47-1A-1 et seq., and that sensitive and trade secret information that they wish to keep confidential should be submitted in accordance with the confidentiality procedures set forth in N.J.A.C. 14:1-12.3.; and
- 6) My organization acknowledges that **submission of false information may be grounds for denial of this Application, and if any of the foregoing statements are willfully false, they are subject to punishment to the full extent of the law, including the possibility of fine and imprisonment.**

Signature: *Garrett Lesner* Date: 8-22-2019

Print Name: Garrett Lesner
 Title: Manager - Business Development Company: NJ Clean Energy Ventures

Signed and sworn to before me on this 22nd day of August, 2019

Lori S. Castello
 Signature
LORI S. CASTELLO
 Name

LORI S. CASTELLO
 ID# 2353137
 NOTARY PUBLIC
 STATE OF NEW JERSEY
 MY COMMISSION EXPIRES 12-4-21



Property Owner Certification

The undersigned warrants, certifies, and represents that:

- 1) I, Antonio Ferriera (name) am the Vice President (title) of the Property Pattenburg Quarry Industries, LLC (name) and have been authorized to file this Applicant Certification on behalf of my organization; and
- 2) The information provided in this Application package pertaining to siting and location of the proposed community solar project has been personally examined, is true, accurate, complete, and correct to the best of the undersigned's knowledge, based on personal knowledge or on inquiry of individuals with such knowledge; and
- 3) My organization or I understand that certain information in this Application is subject to disclosure under the Open Public Records Act, N.J.S.A. 47-1A-1 et seq., and that sensitive and trade secret information that they wish to keep confidential should be submitted in accordance with the confidentiality procedures set forth in N.J.A.C. 14:1-12.3.; and
- 4) My organization acknowledges that **submission of false information may be grounds for denial of this Application, and if any of the foregoing statements are willfully false, they are subject to punishment to the full extent of the law, including the possibility of fine and imprisonment.**

Signature: *Antonio Ferriera*

Date: 8-23-19

Print Name: Antonio Ferriera

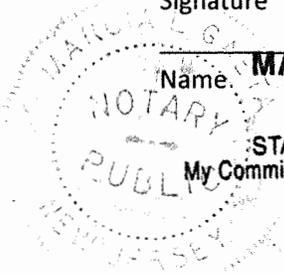
Title: Vice President

Company: Pattenburg Quarry Industries, LLC

Signed and sworn to before me on this 23 day of August, 2019

Marcia L. Gaeta

Signature



Name: **MARCIA L GAETA**
 ID # 2322424
 NOTARY PUBLIC
 STATE OF NEW JERSEY
 My Commission Expires December 3, 2019



Subscriber Organization Certification (optional, complete if known)

The undersigned warrants, certifies, and represents that:

- 1) I, Garrett Lerner (name) am the Manager - Business Development (title) of the Subscriber Organization NJR Clean Energy Ventures (name) and have been authorized to file this Applicant Certification on behalf of my organization; and
- 2) The information provided in this Application package has been personally examined, is true, accurate, complete, and correct to the best of the undersigned's knowledge, based on personal knowledge or on inquiry of individuals with such knowledge; and
- 3) The community solar facility proposed in the Application will be constructed, installed, and operated as described in the Application and in accordance with all Board rules and applicable laws; and
- 4) My organization understands that certain information in this Application is subject to disclosure under the Open Public Records Act, N.J.S.A. 47-1A-1 et seq., and that sensitive and trade secret information that they wish to keep confidential should be submitted in accordance with the confidentiality procedures set forth in N.J.A.C. 14:1-12.3.; and
- 5) My organization acknowledges that **submission of false information may be grounds for denial of this Application, and if any of the foregoing statements are willfully false, they are subject to punishment to the full extent of the law, including the possibility of fine and imprisonment.**

Signature: Garrett Lerner Date: 8-11-2019

Print Name: Garrett Lerner

Title: Manager - Business Development Company: NJR Clean Energy Ventures

Signed and sworn to before me on this 22nd day of August, 2019

Lori S. Castello

Signature

LORI S. CASTELLO

Name

LORI S. CASTELLO
ID# 2353137
NOTARY PUBLIC
STATE OF NEW JERSEY
MY COMMISSION EXPIRES 12-4-21

Section D: Appendix

Appendix A: Product Offering Questionnaire

Complete the following Product Offering Questionnaire. If there are multiple different product offerings for the proposed community solar project, please complete and attach one Product Offering Questionnaire per product offering.

Applicants are expected to provide a good faith description of the product offerings developed for the proposed community solar project, as they are known at the time the Application is filed with the Board. If the proposed project is approved by the Board, the Applicant must notify the Board and receive approval from the Board for any modification or addition to a Product Offering Questionnaire.

Exception: This "Product Offering Questionnaire" is optional if: 1) the Applicant is a government entity (municipal, county, or state), AND 2) the community solar developer will be selected by the Applicant via a Request for Proposals (RFP), Request for Quotations (RFQ), or other bidding process.

This Questionnaire is Product Offering number 1 of 1 (total number of product offerings).

- Community Solar Subscription Type (examples: kilowatt hours per year, kilowatt size, percentage of community solar facility's nameplate capacity, percentage of subscriber's historical usage, percentage of subscriber's actual usage):

Percentage of community solar facility's nameplate capacity.

- Community Solar Subscription Price: (check all that apply)
 - Fixed price per month
 - Variable price per month, variation based on: Fixed discount to community solar bill credit
 - The subscription price has an escalator of _____ % every _____ (interval)

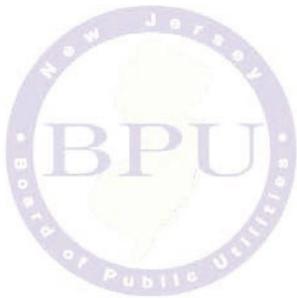
- Contract term (length): _____ months, or 20 years OR month-to-month

- Fees
 - Sign-up fee: \$0
 - Early Termination or Cancellation fees: \$150
 - Other fee(s) and frequency: _____

- Does the subscription guarantee or offer fixed savings or specific, quantifiable economic benefits to the subscriber? Yes No
 If "Yes," the savings are guaranteed or fixed:

- As a percentage of monthly utility bill
- As a fixed guaranteed savings compared to average historic bill
- As a fixed percentage of bill credits
- Other: _____

6. Special conditions or considerations:



Shannon Donnelly

From: Alex Rivera <alex@vepenergy.com>
Date: Wednesday, September 4, 2019 at 10:49 AM
To: "rvba.secretary@gmail.com" <rvba.secretary@gmail.com>
Cc: Gerald Donovan <gdonovan@vepenergy.com>
Subject: HELP

Dear Danielle,

Thank you for taking my call.

We will reach out to you upon receiving NJ 's solar project approval but look forward to initial educational data for the implementation of bee hives in a large solar ground mounted array over Bethlehem Township.

We would appreciate guidance for the possible implementation of this wonderful initiative and details of long term care by a vendor or by ourselves if feasible.

I will list you as a point of educational source for this project,

Thank you,

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|----------------------------------|
| Raritan Valley Beekeepers |
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|--|
| Danielle Miller, Secretary rvba.secretary@gmail.com |
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|-----------------------|
| <hr/> 339 236-1466 |
|-----------------------|

<http://www.njbeekeepers.org/LocalBranches.htm>

Alex Rivera
SVP Project Development & Originations