

### Section B: Community Solar Energy Project Description

Project Name: GRM - East Brunswick

\*This name will be used to reference the project in correspondence with the Applicant.

### I. Applicant Contact Information

Applicant Com	pany/Entity Name:	Advanced Solar Prod	ucts	
First Name: Lyle Last Name: Rawlings				
Daytime Phone: 908-751-5818 x103 Email: <sup>Iy</sup>		lyle@advancedso	larproducts.com	
Applicant Mailing Address: 270 South Main Street, Suite 203				
Municipality: Flemington Count		County: Hunterdo	on	Zip Code:
Applicant is:	🗌 Community Sola	ar Project Owner	🗹 Community	Solar Developer/Facility Installer
	🗆 Property/Site O	wner	🗆 Subscriber (	Organization
Agent (if agent, what role is represented)				
II. Community	Solar Project Owner			
Project Owner	Company/Entity Na	me (complete if kno	wn): <u>NAV EB1, LL</u>	C (Owned by Navisun, LLC)_
First Name: Brendan Last Name: Canavan				
Daytime Phone	Paytime Phone: 908-310-9516 Email: brendancanavan@navisunLLC.com			
Mailing Address: 18 Shipyard Drive, Unit 2A				
Municipality:	lingham	County: Plymouth	)	Zip Code: 02043
		njereane.	rengyicom	Program
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): Advanced Solar Products

First Name: Lyle	Last Name: Rawl	ings		
Daytime Phone: 908-751-5818 >	(103 Email: lyle@advar	Email: Jyle@advancedsolarproducts.com		
Mailing Address: 270 South Main Street, Suite 203				
Municipality: Flemington	County: Hunterdon	Zip Code: 08822		

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): Advanced Solar Products

First Name: Lyle	Last Name: Rawling	s	
Daytime Phone: 908-751-5818 x103	Email: lyle@advance	dsolarproducts.com	
Mailing Address: 270 South Main Street, Suite 203			
	County: Hunterdon	Zip Code: 08822	

IV. Property/Site Owner Information

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.

VI. Proposed Community Solar Facility Characteristics

Community Solar Facility Size (as denominated on the PV panels): <u>2.5</u>\_\_\_\_\_\_ MWdc

\*Any application for a system larger than 5 MWdc will be automatically eliminated. If awarded, projects will be held to the MWdc size indicated in this Application.

Community Solar Facility Location (Address): 6 Joanna Court			
Municipality: East Brunswick	County: <u>Middlesex</u>	Zip Code: <u>08816</u>	
Name of Property (optional, complete if applicable):			



 Property Block and Lot Number(s):
 Block 31.01, Lot 6

 Community Solar Site Coordinates:
 -74.4052811
 Longitude

 40.4447975
 Latitude

Total Acreage of Property Block and Lots:18.44acresTotal Acreage of Community Solar Facility:4.86acres

Attach a delineated map of the portion of the property on which the community solar facility will be located in PDF format. The map must be provided in color. Note: Applications may be required upon request to submit a copy of the delineated map 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 time from Application selection to 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.*): February (month) 2022 (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. Projects must be fully operational within 12 months of receiving conditional approval by the Board (subject to change according to the proposed rule amendment described in the Terms and Conditions).

The proposed community solar facility is an existing project\* .....

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.

\*An 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<sup>\*</sup> ..... ⊻ 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. The site control must be specific to the project in this Application, and may not be contingent on the approval of another Application submitted in PY2.



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.

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 (check all that apply):

- □ a landfill (see question 7 below)
- a brownfield (see question 8 below) ergy.com
- $\Box$  an area of historic fill (see question 9 below)
- ☑ a rooftop (see question 10 below)
- $\Box$  a canopy over a parking lot or parking deck
- □ a canopy over another type of impervious surface (e.g. walkway)
- □ a water reservoir or other water body ("floating solar") (see question 11 below)
- □ a former sand or gravel pit or former mine
- □ farmland\* (see definition below)
- $\Box$  other (see question 5 below): \_\_\_\_

\*Farmland is defined as 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 <u>et seq</u>.) at any time within the ten year period prior to the date of submission of the Application.

5. If you answered "other" to question 4 above, describe the proposed site and explain why it is appropriate for siting a community solar facility:



- 6. 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
  - □ the New Jersey Pinelands

If the project is a ground mounted project (i.e. not rooftop or canopy), and answered "Yes" to either of the options above, include a letter or other determination from the New Jersey Highlands Council or the New Jersey Pinelands Commission, as relevant, stating that the proposed project is consistent with land use priorities in the area.

- 7. If the proposed community solar facility is located, in part or in whole, on a landfill, provide the name of the landfill, as identified in NJDEP's database of New Jersey landfills, available at <a href="http://www.nj.gov/dep/dshw/lrm/landfill.htm">www.nj.gov/dep/dshw/lrm/landfill.htm</a>; Notapplicable
- 8. If the proposed community solar facility is located, in part or in whole, on a brownfield, has a final remediation document been issued for the property? ......Not applicable..................□ Yes ☑ No
   If "Yes," 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. If the proposed community solar facility is located, in part or in whole, on a rooftop, has the Applicant verified that the roof is structurally able to support a solar system? ...... ☑ Yes □ No If "Yes," attach substantiating evidence.
  If "No," the application will not be considered by the Board.
- 11. If the proposed community solar facility is located, in part or in whole, on a water reservoir or other water body ("floating solar"), is the facility located at a water treatment plant or sand and gravel pit that has little to no established floral and faunal resources? Not applicable



If "Yes," provide supporting details and attach substantiating evidence if needed. \*All proposed floating solar projects are required to meet with NJDEP's OPPN prior to submitting an Application. Applicants are responsible for contacting NJDEP with sufficient advance notice to ensure that a meeting will occur prior to the deadline to submit an Application. Please see section VIII Permits, Question 2 for more information.

- 14. The proposed community solar facility is located in an Economic Opportunity Zone, as defined by the New Jersey Department of Community Affairs ("DCA") ...... □ Yes ▷ No If "Yes," attach proof that the facility is located in an Economic Opportunity Zone.
  \*More information about Economic Opportunity Zones are available at the following link: <a href="https://www.state.nj.us/dca/divisions/lps/opp\_zones.html">https://www.state.nj.us/dca/divisions/lps/opp\_zones.html</a>.
- 15. 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 site as "preserved" from a municipal, county, or state entity, and evidence that such designation would not conflict with the proposed solar facility.
- 17. 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.



18. The proposed community solar facility has been specifically designed or planned to preserve or enhance the site (e.g. landscaping, site and enhancements, pollination support, etc.) This represents site improvements beyond required basic site improvements ...... ✓ Yes □ No If "Yes," explain below, and provide any substantiating documentation in an attachment. Explain how the proposed site enhancements will be made and maintained for the life of the project. If implementing pollination support, explain what type of pollination support, how this support is expected to help local ecosystems, and whether the proposed pollination support has received certifications or other verification.

For more detail, see Section VII. Community Solar Facility Siting Question 18. Attachment

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19. This question is for informational purposes only, and will not impact the Application's score. The Board is interested in learning more about ways in which "dual use" projects may be implemented in the Pilot Program:

The proposed community solar facility is a "dual use" project: i.e. the project site will remain in active agricultural production throughout the life of the project (e.g. crop production under or between the panels, livestock grazing).....  $\Box$  Yes  $\boxdot$  No \*Wildflower planting or other pollination support is not considered dual use for purposes of this question (pollination support is question 18).

If "Yes," explain what agricultural production will be maintained on the site and will be consistent with the presence of a solar system. Provide any substantiating documentation in an attachment.



**VIII.** Permits

The Applicant has completed the NJDEP Permit Readiness Checklist, and will submit it as an attachment to this Application...... Not applicable...... Yes No
 If "No," the Application will be deemed incomplete. This requirement only applies to ground mounted and floating solar projects. Community solar projects located on a rooftop, parking lot, or parking structure are exempt from this requirement.

\*Applicants are <u>not required</u> to submit the Permit Readiness Checklist to NJDEP prior to submitting an Application to the Board, except in the case of floating solar projects.

2. The Applicant has met with NJDEP's OPPN ..... Not applicable □ Yes ☑ No If "Yes," attach meeting notes or relevant correspondence with NJDEP's OPPN.

\* If the Applicant met with OPPN or received comments from OPPN (formerly PCER) for this project as part of the Program Year 1 Application process, and if the details of the project and the site characteristics have remained the same, those comments remain valid. Please include those comments or meeting notes as an attachment to the Application.

\*A meeting with NJDEP's OPPN is <u>not required</u> prior to submitting an Application. Exception: all floating solar projects are required to meet with NJDEP's OPPN prior to submitting an Application. Applicants with a floating solar project are responsible for contacting NJDEP with sufficient advance notice to ensure that a meeting will occur prior to the deadline to submit an Application.

3. The Applicant has received all non-ministerial permits\* for this project (optional) No non-ministerial permits required. ☑ Yes □ No

\*Receiving all non-ministerial permits is <u>not required</u> prior to submitting an Application. \*A non-ministerial permit is one in which one or more officials consider various factors and exercise some discretion in deciding whether to issue or deny a permit. This is in contrast to a ministerial permit, for which approval is contingent upon the project meeting pre-determined and established standards. Examples of non-ministerial permits include: local planning board authorization, use variances, Pinelands or Highlands Commission approvals, etc. Examples of ministerial permits include building permits and electrical permits.

- 4. 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. 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.

Permit Name & Description	Permitting Agency/Entity	Date Permit Applied for ( <i>if applicable</i> ) / Date Permit Received ( <i>if applicable</i> )
Electrical Permit	East Brunswick Municipality	Application submitted on 2/3/2021
Building Permit	East Brunswick Municipality	Application submitted on 2/3/2021
Utility Interconnection Approval	PSE&G	Application date: 12/16/2020
	me townside	
	change se a s	

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

5. The Applicant has consulted the hosting capacity map of the relevant EDC via the EDC's website (links are available on the NJCEP website) 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

If "Yes," include a screenshot of the capacity hosting map at the proposed location, showing the available capacity.

If the hosting capacity map shows insufficient capacity, the Application will not be considered by the Board, unless the Applicant provides: 1) a letter from the relevant EDC indicating that the hosting capacity map is incorrect in that location, or 2) an assessment from the relevant EDC of the cost of the interconnection upgrade that would be required to enable the interconnection of the proposed system, and a commitment from the Applicant to pay those upgrade costs if the project were to be selected by the Board.

<u>Exception</u>: Projects located in PSE&G service territory for which the hosting capacity map shows insufficient capacity available at the planned location may be eligible for a waiver of this requirement. If this application is seeking to exercise this waiver, please check "Yes" below and attach the waiver requirements as described in the Board's Order: <u>https://www.njcleanenergy.com/files/file/CommunitySolar/FY21/8E%20-</u>

%20ORDER%20PSEG%20Interconnection.pdf.

This project is exercising the PSE&G hosting capacity map waiver: ..... 🗌 Yes 🗹 No



If "Yes," include the interconnection study received from the EDC.

See attached note from applicant regarding interconnection, provided in Section VIII. Permits Question 6 Attachment.

IX. Community Solar Subscriptions and Subscribers

- 1. Estimated or Anticipated Number of Subscribers (*please provide a good faith estimate or range*): 310 420
- 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:
 100%
 Commercial:
 \_\_\_\_\_\_

 Industrial:
 Other:
 \_\_\_\_\_\_\_

 (define "other":
 )

- 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 has a clear plan for effective and respectful customer engagement process. ..... ✓ Yes No If "Yes," attach evidence of experience on projects serving LMI communities or partnerships with organizations that have experience serving LMI communities.
- 5. The proposed community solar project will allocate at least 51% of project capacity to residential customers ...... ✓ Yes □ No

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.

If "No," please be aware that, if, at any time during the operating life of the community solar project an affordable housing provider wishes to subscribe to the community solar project as an LMI subscriber, it must submit a signed affidavit that the specific, substantial, identifiable, and quantifiable benefits from the community solar subscription will be passed through to its 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?

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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)* 
  - $\Box$  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 for LMI subscribers: (*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 .......  $\square$  Yes  $\square$  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

 $\Box$  Other:

If "Yes," the proposed savings represent:

 $\Box$  0% - 5% of the customer's annual electric utility bill or bill credit

 $\Box$  5% - 10% of the customer's annual electric utility bill or bill credit

 $\square$  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 ownershi	p of a share of
the community solar facility	<mark> Yes</mark> 🗹 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. Product Offering for non-LMI subscribers: (*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:

 $\Box$  A percentage saving on the customer's annual electric utility bill

- $\boxdot$  A percentage saving on the customer's community solar bill credit
- □ Other: \_\_\_\_\_

If "Yes," the proposed savings represent:

 $\square$  0% - 5% of the customer's annual electric utility bill or bill credit

 $\square$  5% - 10% of the customer's annual electric utility bill or bill credit

 $\square$  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 ...... I Yes I 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.



12. 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	d 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: <u>Advanced Solar Products/</u>	Contact Name: Escher	
Daytime Phone: 609-413-1749	Email: gescher@advancedsolarproducts.com	

\*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 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
- 2. The proposed community solar project is being developed by or in partnership or collaboration\* with the municipality in which the project is located ..... □ Yes □ No If "Yes," explain how and attach evidence of the project being developed by or in partnership or collaboration with the municipality in which the project is located.

\*Partnership or collaboration with the municipality is defined as clear and ongoing municipal involvement in the approval of the design, development, or operation of the proposed community solar project (e.g. project is located on a municipal site, municipality facilitating subscriber acquisition, municipal involvement in defining the subscription terms, etc.). Examples of evidence may include a formal partnership, a municipal request for proposals or other public bidding process, letter describing the municipality's involvement in the project or meeting minutes. Documentation must be specific to the project described in this Application; "generic" documentation of support that applies to multiple projects submitted by the same Applicant will not be accepted.

3. The proposed community solar project is being developed by or in partnership or collaboration\* with one or more local community organization(s) and/or affordable housing providers in the area in which the project is located ...... ☑ Yes □ No



If "Yes," explain how and attach evidence of the project being developed by or in partnership or collaboration with the local community organization(s) and/or affordable housing providers. \*Partnership or collaboration is defined as clear and ongoing involvement by the local community organization(s) and/or affordable housing providers in the approval of the design, development, or operation of the proposed community solar project (e.g. community organization owns the proposed site, community organization is facilitating subscriber acquisition or was involved in the design of the community solar product offering, etc.). Documentation must be specific to the project described in this Application; "generic" documentation of support that applies to multiple projects submitted by the same Applicant will not be accepted.

We have received a letter of support for this project from New Jersey PACE and CRCS (parent organization) see Section X. Community Engagement Question 3. Attachment and from the local union see Section XII. Other Benefits Question 4. Attachment.

The proposed community solar project was developed, at least in part, with support and in consultation with the community in which the project is located\* ...... ✓ Yes □ No If "Yes," please describe the consultative process below.

\*A community consultative process may include any of the following: letter of support from municipality and/or community organizations and/or local affordable housing provider demonstrating their awareness and support of the project; one or more opportunities for public intervention; and/or outreach to the municipality and/or local community organizations and/or affordable housing provider.

For details please see Section X. Community Engagement Question 4 Attachment.

# XI. Project Cost

This section, "Project Cost," 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.

1. Provide the following cost estimates and attach substantiating evidence in the form of an unlocked Excel spreadsheet model:

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.



XII. Other Benefits

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." Consistent with the Clean Energy Act of 2018, the Board is no longer accepting applications for the SREC Registration Program ("SRP"). Projects granted conditional approval to participate in PY2 will be eligible to apply for the TI Program.

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:

Accelerated depreciation, Investment tax credit (ITC)

# 1. The proposed community solar facility will be paired with storage ...... □ Yes ☑ No

If "Yes," please describe the proposed storage facility:

- a. Storage system size: \_\_\_\_\_ MW \_\_\_\_\_ MWh
- b. The storage offtaker is also a subscriber to the proposed community solar facility

\*Community solar credits will only be provided to community solar generation; credits will not be provided to energy discharged to the grid from a storage facility (i.e. no "double counting").

2. The proposed community solar facility will be paired with one or more EV charging stations

......\* 🗹 Yes 🗌 No

If "Yes," how many EV charging stations: <u>1 or 2</u>

Will these charging stations be public and/or private? Private

Please provide additional details:

\*Property owner is committed to installing charging stations in the future as employees begin purchasing electric vehicles.



The owner chooses to delegate to the Subscriber Manager the role of suggesting an energy audit to Subscribers, as the Subscriber Manager will know of these opportunities during the normal course of its business.

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: 20\_\_\_\_\_

If "Yes," estimated number of permanent jobs created in New Jersey: \_\_\_\_\_\_

If "Yes," explain what these jobs are:

Temporary jobs will be created for union electrical installers, including foremen, journeymen, apprentices, etc. For more information please see Section XII. Other Benefits Question 4 Attachment.

# 

The local union hall (I.B.E.W. 456) will be used for electrical construction at the site. Our electrical Subcontractor has on many occasions brought in apprentices to train on such job sites. A letter of support from the union is provided in Section XII. Other Benefits Question 4 Attachment.

# XIII. Special Authorizations and Exemptions

Is the proposed community solar project co-located with another community solar facility (as defined at N.J.A.C. 14:8-9.2)? .....
 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. Is the Applicant a government entity that plans to select the developer via such bidding process?

..... 🗆 Yes 🗹 No

If "Yes," attach a letter describing the proposed bidding process and a copy of the request for bids (RFP, RFQ, or other bidding document) that is ready to be issued if the project is granted conditional approval by the Board. 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.
- 5. The Board has proposed an amendment to the Pilot Program rules, which, if approved, would allow municipally-owned community solar projects to submit an application for a project that requests an exemption from the provisions at N.J.A.C. 14:8-9.10(b)(1) mandating subscriber enrollment via affirmative consent (i.e. an opt-out community solar project). Projects that intend



to utilize opt-out subscriber enrollment if the proposed rule amendment is approved by the Board must indicate such intent below. If the Application is selected but the proposed rule amendment is not approved by the Board, the project will be required to proceed using affirmative consent (i.e. "opt-in") subscriber enrollment rules, as currently provided for in the Pilot Program rules at N.J.A.C. 14:8-9.10(b)(1).

- A. This Application is for an opt-out community solar project...... 🗆 Yes 🗹 No

If "Yes," the municipality name is: \_\_\_\_

- If "No," the project will not be considered for eligibility as an opt-out community solar project.
- C. The proposed opt-out project has been authorized by municipal ordinance or resolution Not applicable Yes No If "Yes," attach a copy of the municipal ordinance or resolution allowing the development, ownership and operation an opt-out community solar project contingent on the proposed rules

ownership, and operation an opt-out community solar project, contingent on the proposed rules being approved by the Board.

If "No," the project will not be considered for eligibility as an opt-out community solar project.

- D. The proposed opt-out project will allocate all project capacity to LMI subscribers Not applicable If "No," the project will not be considered for eligibility as an opt-out community solar project.
- E. Describe the process by which the municipality will identify the customers that will be automatically enrolled in the proposed opt-out project: <u>Not applicable</u> Not applicable
- F. The municipal applicant has reviewed the proposed rule amendment allowing for opt-out projects, and agrees to adhere to the proposed rules and any subsequent modification if they are approved by the Board. The applicant understands that any approval for the project to operate as an opt-out community solar project is contingent on the proposed rule amendment being approved by the Board. The applicant understands that, if the proposed rule amendment is not approved by the Board, the project, if approved, will be required to



adhere to the existing "opt-in" rules for subscriber enrollment (N.J.A.C. 14:8-9.10(b)(1)). Not.applicable...... Ves. No Attach an affidavit that the municipal project owner will comply with all applicable rules and regulations, particularly those relating to consumer privacy and consumer protection.





#### Section C: Certifications

Instructions: Original signatures on all certifications are required. All certifications in this section must be notarized; instructions on how to submit certifications will be provided as part of the online application process. Certifications must be dated after October 3, 2020: PY1 certifications may not be reused in PY2.

#### Applicant Certification

The undersigned warrants, certifies, and represents that:

- I, Lyle K. Rawlings (name) am the President and CEO (title) of the Applicant Advanced Solar Products, Inc. (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 Transition Incentive Program, if applicable; and
- 5) My organization understands that 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 any claimed sensitive and trade secret information should be submitted in accordance with the confidentiality procedures set forth in N.J.A.C. 14:1-12.3; and
- 6) I acknowledge that submission of false information may be grounds for denial of this Application, and if any of the foregoing statements are willfully false, I am subject to punishment to the full extent of the law, including the possibility of fine and imprisonment.

Date: Signature: Print Name: Lyle K. Rawlings Title: President and CEO Company: Advanced Solar Products, Inc. Signed and sworn to before me on this 3rd day of February, 2021 Kathleen Signature KATHLEEN VANDEGRIFT Name NOTARY PUBLIC OF NEW JERSEY COMMISSION EXPIRES 7/27/2025 Page 25

New Jersey Board of Public Utilities

Program Year 2, Application Period 1



#### 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. Lyle K. Rawlings (name) am the President and CEO \_\_\_\_\_ (title) of the Project Developer Advanced Solar Products, Inc. (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
- The system proposed in the Application will be constructed, installed, and operated in accordance with all Board policies and procedures for the Transition Incentive Program, if applicable; and
- 5) My organization understands that 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 any claimed sensitive and trade secret information should be submitted in accordance with the confidentiality procedures set forth in N.J.A.C. 14:1-12.3; and
- 6) I acknowledge that submission of false information may be grounds for denial of this Application, and if any of the foregoing statements are willfully false, I am subject to punishment to the full extent of the law, including the possibility of fine and imprisonment.

Date: 2/3/2/ Signature: Print Name: Lyie K. Rawlings

Title: President and CEO

Company: Advanced Solar Products, Inc.

Signed and sworn to before me on this

day of Ferning, 2021

KATH EL VANDEGRIFT NOTARY PUBLIC OF NEW JERSEY COMMISSION EXPIRES 7/27/2025

Page 26 of 36

Program Year 2, Application Period 1

New Jersey Board of Public Utilities



#### **Project Owner Certification**

The undersigned warrants, certifies, and represents that:

- 1) I, <u>Douglas Johnsen</u> (name) am the <u>Manager</u> (title) of the Project Owner <u>Nav EB1, LLC (Owned by Navisun, LLC)</u> (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
- 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 Transition Incentive Program, if applicable; and
- 5) My organization understands that 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 any claimed sensitive and trade secret information should be submitted in accordance with the confidentiality procedures set forth in N.J.A.C. 14:1-12.3; and
- 6) I acknowledge that submission of false information may be grounds for denial of this Application, and if any of the foregoing statements are willfully false, I am subject to punishment to the full extent of the law, including the possibility of fine and imprisonment.

Date:

Signature

Print Name: Douglas Johnsen Title: Manager

Company: Nav EB1, LLC (Owned by Navisun, LLC)

Signed and sworn to before me on this 28th day of January, 20,21

Signature

Name

RON ASANI Notary Public Connecticut My Commission Expires Aug 31, 202



#### **Property Owner Certification**

The undersigned warrants, certifies, and represents that:

- 1) I, \_\_\_\_\_\_\_ (name) am the \_\_\_\_\_\_ (title) of the \_\_\_\_\_\_ (title) of the <u>Property Joanna Court Realty, LLC</u> (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 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 any claimed sensitive and trade secret information should be submitted in accordance with the confidentiality procedures set forth in N.J.A.C. 14:1-12.3; and
- 4) I acknowledge that submission of false information may be grounds for denial of this Application, and if any of the foregoing statements are willfully false, I am subject to punishment to the full extent of the law, including the possibility of fine and imprisonment.

Date: Signature: Reyler Print Name: Title: Company

Signed and sworn to before me on this \_29 day of JANIMRY\_, 20 21

Signature

Edward F. Soonica

Name

EDWARD F SOONICA NOTARY PUBLIC HUDSON COUNTY, NEW JERSEY ID # 2311085 MY COMMISS' ON EXPIRES FEB. 05, 2024



## **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. Variations in any product offering require a separate Product Offering Questionnaire. 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  $\frac{1}{1}$  of  $\frac{1}{1}$  (total number of product offerings).

This Product Offering applies to:

- LMI subscribers
- non-LMI subscribers
- ☑ both LMI and non-LMI subscribers
- 1. 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
- 2. Community Solar Subscription Price: (check all that apply)
  - $\Box$  Fixed price per month
  - ✓ Variable price per month, variation based on: \_\_\_\_\_\_ The value of the bill credit allocated to the account less the discount rate
  - □ The subscription price has an escalator of % every (interval)
- 3. Contract term (length): <u>3</u> months, or \_\_\_\_\_ years OR  $\Box$  month-to-month
- 4. Fees
  - □ Sign-up fee: <u>none</u>
  - Early Termination or Cancellation fees: <u>none</u>
  - Other fee(s) and frequency: <u>none</u>
- 5. 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:

- $\Box$  As a percentage of monthly utility bill
- $\hfill\square$  As a fixed guaranteed savings compared to average historic bill
- ☑ As a fixed percentage of bill credits
- □ Other: \_\_\_\_\_\_
- 6. Special conditions or considerations:

none



# **GRM – East Brunswick Attachment Table of Contents**

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# COMMUNITY SOLAR ENERGY PILOT PROGRAM PROGRAM YEAR 2 FOR: GRM - EAST BRUNSWICK EAST BRUNSWICK, NJ 08807



To: New Jersey Board of Public Utilities South Clinton Avenue, 7th Floor Post Office Box 350 Trenton, New Jersey 08625-0350 February 5, 2021

New Jersey Board of Public Utilities 44 South Clinton Avenue, 7th Floor Post Office Box 350 Trenton, New Jersey 08625-0350

RE: Program Year 2, Community Solar Energy Pilot Program Application

Dear Board of Public Utilities Staff,

The Team of Advanced Solar Products, Inc. ("ASP") and Navisun, LLC is pleased to submit this Community Solar application for Program Year 2 of the Community Solar Energy Pilot Program. We are proposing to construct a 2.5 MW DC solar PV system at 6 Joanna Court in East Brunswick, NJ to service customers in the PSE&G territory. The community solar facility will be a roof top project that will service East Brunswick township and adjacent municipalities.

The GRM East Brunswick project has the support of the Township, the local union, as well as the other local community organizations and affordable housing providers, who all support the project host's desire to increase renewable energy in the area, increase access to renewable energy for populations that have previously had limited access, provide discounted electricity to LMI communities and bring local jobs and job training to the area. With the property owner's commitment to "greening" other aspects of their facility as part of this project, including adding EV chargers at their facility, adding landscaping to encourage pollinators, and adopting energy efficient practices at their facility, this community solar project stands to provide substantial benefits to the community as a whole.

If you have any questions, please do not hesitate to contact me at (908) 751-5818. Thank you for your consideration.

Sincerely, Advanced Solar Products, Inc.

1 Le Vou

Peter L. Sudano Vice President Advanced Solar Products, Inc. 270 South Main Street, Suite 203 Flemington, NJ 08822 Section VI. Proposed Community Solar Facility Characteristics Delineated Map of Property





Section VII. Community Solar Facility Siting Proof of Site Control

# C ONFIDENTIA L



CONFIDENTIAL



CONFIDENTIAL


















Section VII. Community Solar Facility Siting Structural Feasibility Reports



# Advancing Our Client's Vision

## **Structural Feasibility Report**

## **Proposed Solar Array**

GRM Document Management 6 Joanna Court East Brunswick, NJ 08816

**Prepared for:** 

#### **Mr. Rick Schrack**

Project Development Manager Advanced Solar Products, Inc. 270 South Main Street, Suite 203 Flemington, NJ 08822



1800 Route 34, Suite 101 • Wall, NJ • 07719 • T 732.312.9800 • F 732.312.9801 NEW JERSEY | NEW YORK | PENNSYLVANIA | GEORGIA **fpa**engineers com

<image>



## I. Executive Summary

Advanced Solar Products (ASP) procured French and Parrello Associates (FPA) to perform a structural feasibility study and a subsequent letter report for the proposed roof mounted solar PV ballasted racking system installation on top of the flat roof at the GRM Document Management building located at 6 Joanna Court, East Brunswick, NJ, (See **Photo #1** & **#2**), as a Community Solar program. The scope of work is limited to our field observations and a preliminary structural analysis of the potential residual capacities and current structural adequacy for supporting the proposed system.

The goal is to provide ASP our opinion regarding the residual capacities per the current building code(s) and ordinances adopted by the State of New Jersey (NJ). Rational assumptions of the existing roofing weight and hung supports within the area were made as part of our assessment. This assessment is limited to the Structural Review, other local authority defined reviews such as zoning, electrical and fire protection are <u>not</u> included.

Based on the visual observation of the as built and preliminary structural engineering analysis, it is FPA's opinion that <u>the subject facility is considered structurally feasible to support the proposed roof</u> <u>mounted solar PV ballasted system</u>. The estimated residual capacities, in a lbs. per square ft. format (psf), of each section are presented in a roof map in the appendix.



Photo #1 Exterior of facility

Photo #2 Flat roof proposed for solar PV

The estimated allowable uplift force capacities, in lbs., are provided for the mechanical connection consideration by the racking manufacture. The estimated allowable maximum solar PV & ballasted system weight is suggested to meet the seismic code provision.



## II. Building Information and Code Requirements

According to historic aerials, the building was built between 1979 and 1987. According to the roofing warranty certificate by CentMark the facility was reroofed in 2018. No existing architectural or structural drawings were provided for our review. See the highlighted roof section on the satellite image below for areas where solar panels are proposed:



Satellite Image - Taken on September 20, 2020

The existing warehouse is approximately 206,683 SF in plan. There are (3) building expansion joints segmenting the structure into (4) independent lateral load resisting systems. Based on the field observations the lateral load resistance system was observed to be steel braced frames.

## **III. Existing Structure Descriptions**

FPA structural engineers visited the site on December 21, 2020 to perform visual observations and field measurements of the existing structural frames from readily accessible locations within the



GRM Document Management Proposed Solar Array Structural Feasibility Report FPA Project No. 16878.001 January 11, 2021

building. The purpose of this visit was to review the existing member sizes and current conditions to estimate the residual capacities for supporting the proposed solar PV systems. The existing warehouse facility is currently used for storing boxes of documents on metal shelving racks.

The existing EPDM roofing and insulation is supported by a 1.5-inch type B corrugated metal roof deck (See **Photo #3**). The main structural supports are 24-inch deep joists spaced at  $\pm$  5'-9" on center and spanning between 21-inch and 24-inch deep cantilevered and simply supported wide flange steel girders (See **Photo #4**). The most typical bay is approximately 40'-0" x 40'-0". The columns were measured on site to be 20-inch wide flange members. The foundation is assumed to be traditional spread footings.







Photo #4 21-inch deep girders

## IV. Methodology

The following methods were employed during our assessment:

- On site visual observation of the components of the structural systems that were exposed to view during our site visit on December 21, 2020.
- Utilization of standard reference sources including, but not limited to, the IBC 2018 Edition (Current adopted New Jersey State Building Code), ASCE 7-16, SJI 75-Year Steel Joist Manual and AISC Manual of Steel Construction.
- Preliminary engineering calculations based on the provided documents and current NJ adopted building codes.
- Professional Engineer's judgment based on past experiences.



## V. Assessment Criteria

#### Applicable Codes and Standards:

Current New Jersey adopted IBC 2018 Building Code ASCE 7-16 Minimum Design Loads for Buildings and Other Structures Steel Joist Institute (SJI) 75 Year Joist Book AISC Structural Steel Specifications

#### Assumptions and Input:

Risk Category	II
Dead: (estimated from field observation	ations)
Rigid Insulation	1.5 psf
EPDM Roof Membrane	0.5 psf
Metal Roof Deck	2.5 psf
Elect/Mech/Plumb	4.0 psf
Steel Joists	3.0 psf
<u>Live:</u> Ground Snow Load (P <sub>g</sub> )	25 psf
Flat Roof Snow Load (P <sub>f</sub> )	20 psf
<u>Wind:</u> Ultimate Wind Speed (mph) Exposure Category	114 mph B
<u>Seismic:</u> Site Class Site Specific Coefficients	D (Assumed per ASCE 7-16 11.4.3) $S_S = 0.257$ $S_{DS} = 0.273$ $S_1 = 0.056$ $S_{D1} = 0.089$
Seismic Design Category	В



Roof Memb.

Snow

#### Snow Drift

For the roof sections proposed for the solar PV installations, windward and leeward snow drift was considered when reviewing the affected roof members.



#### Worst Case Scenario of Low-High Roof Snow Drift:

The height and width of snow drift at this area are: (per ASCE 7-10 Section 7.7)  $h_d = 0.43 \cdot \sqrt[3]{l_u} \cdot \sqrt[4]{p_g + 10} - 1.5$ 

Worst Case Scenario of Roof Projection Snow Drift:

The height and width of snow drift at this area are: (per ASCE 7-10 Section 7.8)  $h_d = 0.43 \cdot \sqrt[3]{l_u} \cdot \sqrt[4]{p_g + 10} - 1.5$ 

 $0.75 \text{ x} h_d$ 

 $W_{roof projection}$  = horizontal distance of drift = 4 hd

See the satellite image on the next page and in the Appendix for the snow drifting location and code-applicable dimensions.



GRM Document Management Proposed Solar Array Structural Feasibility Report FPA Project No. 16878.001 January 11, 2021





## VI. Conditions and Assessment

#### **Gravitational Load Analysis**

The residual capacities of the existing members have been calculated based on an assumption of the dead loads (self-weight of the members and possible hung loads as discussed previously) combined with the current NJ State adopted building code-applicable live loads. Based on the onsite observations and current building code requirements, FPA estimated the residual capacities of the targeted areas for installing the proposed roof mounted solar PV panels and racking system.

Per our preliminary engineering calculations, the governing load case for all areas is DL + SL (dead load plus snow load) per ASCE 7-16. The controlling members dictating the residual capacity threshold at each area are as follows:

Roof Structural Description	Span	Spacing	Preliminary Estimate
			Residual Capacity
Existing 24-inch deep joists	39.5 ft	5.72 ft	12.5 psf
Existing 28-inch deep joists	50.0 ft	5.72 ft	8.6 psf

#### Seismic Force-Resistance Review

Among the building codes and ordinances currently adopted by NJ, it is our opinion that ASCE 7-16 Appendix 11B.3 which reads: "The entire structure shall not be required to comply with the seismic force-resistance requirements for new structures where [...] the addition does not increase the seismic forces in any structural element of the existing structure by more than <u>10 percent</u> unless the capacity of the element subject to the increased force is still in compliance with this standard." shall govern the seismic related requirement. Since the seismic loads are inertia forces induced by seismic mass (the affected building weight), the additional roof mounted system weight should be limited to 10 percent of the existing seismic mass as the threshold, assuming that the proposed system shall be installed uniformly to distribute the additional incurred seismic reactions following the original designed load paths to the as-built lateral loads resisting systems (LLRSs).

Per preliminary engineering calculations and an assumption of the existing dead loads the total existing seismic mass and allowable additional weight (the threshold) due to the PV system installation is as follows:

Roof Section	Existing Seismic Mass	Allowable PV System Weight
A	3382 kips	338.2 kips
В	1617 kips	161.7 kips
С	2532 kips	253.2 kips
D	2266 kips	226.6 kips



#### Uplift Resistance in Roof Diaphragm

The estimated allowable uplift and shear force capacities of the metal deck have been calculated for the mechanical connection locations. Please note these values are **<u>unfactored</u>**.

Strip	Strip	Allowable Uplift	Allowable Shear
Width	Length	(Vertical)	(Horizontal)
1.25 ft	5.72 ft	593 lbs	* 708 lbs

\* Note: The allowable horizontal shear values are based on assuming the proposed mechanical connections consist of (4) #10 screws each.

#### **Building Foundation Review**

The existing foundation systems are considered adequate to support the additional weight from the proposed ballasted solar PV system installation due to the proposed PV system's light weight as opposed to the high axial load capacity within the frame columns and foundation system.

### VII. Conclusion

The results of this preliminary investigation indicate that <u>the targeted roofs are considered feasible</u> to support the proposed roof mounted solar PV system installations subject to the above <u>recommendations</u>. Major reinforcement added to the existing structural frames and their components in order to support the additional loads from an ideal roof mounted solar PV system is <u>not</u> required.

The residual capacities are estimated depending on the joist size, spacing and span at different roof sections. The maximum solar PV system weight should be limited to 10% of the existing seismic mass as suggested. The maximum uplift reaction at any mechanical connections to be determined by the racking manufacturers should be limited the allowable uplift and shear forces suggested.

Please refer to the following roof map(s) for the initial estimated residual capacities, allowable uplift capacity at racking connection(s), and building sections with independent LLRSs, called out on a satellite image taken on September 20, 2020.

Please note that the preliminary structural assessment performed herein is based on schematic calculations and should only be used as references to estimate the proposed PV system load boundaries. Any additional information provided, or as-built condition revealed shall affect our conclusion stated herein. FPA reserves the right to amend our statement if any of the said conditions shall occur.



GRM Document Management Proposed Solar Array Structural Feasibility Report FPA Project No. 16878.001 January 11, 2021

I trust that the above information addresses your request. If you have any questions, please do not hesitate to contact me.

Sincerely,

#### FRENCH & PARRELLO ASSOCIATES, PA

Temei Sam Chen

T. Sam Chen, PE, 24GE0044993 Structural Engineering Department Manager Building Design Services



## APPENDIX

- Initial Residual Capacity Map w/ Suggested Connection Uplift Capacity
- Snow Drift Map
- Seismic Map Indicating As-built Expansion Joints







Section VII. Community Solar Facility Siting Question 18. Attachment

#### East Brunswick – 6 Joanna Court

Community Solar Project - Site Enhancements and Improvements

#### Landscaping and site enhancements

As part of the GRM East Brunswick community solar project, the property owner, Joanna Court Realty LLC, will upgrade a small area near the office entrance with the planting of viburnums and other native shrubs that are intended to encourage and host the largest numbers of butterflies and other pollinators for more urban landscape settings. This will reduce the amount of macadam and provide a respite from the paved area associated with trucking warehouses. This improvement, which will be maintained along with other plantings onsite, will complement the wooded areas surrounding the building, encouraging pollinators to visit the site in increasing numbers. In addition to consulting resources such as the North Jersey Butterfly Club's list of Butterfly Caterpillar Plants for New Jersey Gardens (see list provided on the following pages), local nurseries and landscape architects specializing in the planning of gardens specifically designed to encourage and attract pollinators will be consulted prior to planting. In addition to these new shrubs, the current plantings on site will continue to be maintained as they provide a good, strong habitat for wildlife and other pollinators.

Watering of this newly planted area will be accomplished primarily through the use of rain water runoff from an adjacent paved area which is at a somewhat higher elevation which would provide the benefit of alleviating water runoff issues as well as utilizing less potable water to maintain the new plantings.

In addition, a bike rack will be also be installed at the GRM East Brunswick site in order to encourage employees to rely less on motorized transportation to work and encourage them to bike to work on days where weather conditions allow.

Please see the sketch plan on the page that follows showing the proposed location of the plantings and bike rack installation.

#### Energy efficiency site improvements

GRM is a company that places high priority on the importance of recycling. At its core business, GRM specializes in warehousing paper documents, and its property in East Brunswick has a sorting and packaging platform where the documents to be discarded are put in recyclable boxes for shipment (with certificates) by a third party. Once shipped, these documents go to a shredding facility in the area and are in turn delivered to a recycling plant. GRM conducts this process on a daily basis. As part of this protocol, GRM evaluates and disposes of waste regularly, and in an environmentally conscious way.

In addition to its recycling efforts, GRM replaces all light bulbs, including exterior bulbs, with LEDs on an ongoing basis.

As part of its ongoing commitment to environmental sustainability, GRM is excited to host a solar PV system on its roof through its proposal for a community solar project and will continue, as part of this project, to make upgrades to its facility both in terms of landscape improvements to green its property and will continue to make energy efficiency upgrades as a normal course of its business operations.





#### North Jersey Butterfly Club www.naba.org/chapters/nabanj/



## BUTTERFLY CATERPILLAR PLANTS FOR NEW JERSEY GARDENS

(Butterfly species most likely to visit gardens are shown in **boldface**)

NATIVE HOSTPLANTS		
Common Name	Scientific Name	Butterfly Species
Violets	Viola spp.	Great Spangled Fritillary, Meadow Fritillary
Milkweeds	Asclepias spp. (Common, Swamp, Butterfly)	Monarch
Turtlehead	Chelone glabra	Baltimore Checkerspot
Pussytoes	Antennaria spp.	American Lady
Sweet Everlasting	Pseudognaphalium obtusifolium	American Lady
False Nettle	Boehmeria cylindrica	Red Admiral, Question Mark, Eastern Comma
Asters	Aster (aka Symphyotrichum, Eurybia)	Pearl Crescent
Golden Alexanders	Zizia aurea (most other native Carrot Family genera also used)	Black Swallowtail
Pea Family:	Many species used	Gray Hairstreak, Eastern Tailed-Blue
Showy Tick-Trefoil	Desmodium canadense	Silver-spotted Skipper, Hoary Edge, Southern and Northern Cloudywings, Gray Hairstreak
Roundheaded Bush-clover	Lespedeza capitata	Hoary Edge, Southern and Northern Cloudywings
Grass Family:		
Bluegrasses	Poa spp.	Little Wood-Satyr, Common Wood-Nymph, Peck's Skipper, Tawny-edged Skipper, Northern Broken-Dash, Crossline Skipper, Delaware Skipper, Hobomok Skipper
Panic grasses	Panicum spp.	Northern Pearly-eye, Indian Skipper, Delaware Skipper, Hobomok Skipper Northern Pearly-eye, Common Wood-Nymph.
Bluestem Grasses	Andropogon, Schizachyrium	Indian Skipper
Bottlebrush Grass	Elymus hystrix	Northern Pearly-eye
Purpletop Tridens	Tridens flavus	Common Wood-Nymph, Crossline Skipper, Little Glassywing, Zabulon Skipper
Shrubs:		
Blueberries	Vaccinium spp.	Striped Hairstreak, Spring Azure
Viburnums	Native Viburnum spp.	Spring Azure
Dogwoods (shrub)	Cornus sericea, amomum, racemosa	Summer Azure
Spicebush	Líndera benzoin	Spicebush Swallowtail
Prickly-ash	Zanthoxylem americanum	Giant Swallowtail
Common Hoptree	Ptelea trifoliata	Giant Swallowtail
Willows	Salix spp.	Mourning Cloak, Viceroy, Red-spotted Purple
Winged Sumac	Rhus copallina	Red-banded Hairstreak
Trees:		
Oaks	Quercus spp.	Banded, Oak and White M Hairstreaks; Sleepy Juvenal's and Horace's Duskywings
Hickories	Carya spp.	Hickory Hairstreak
Elms	Ulmus spp.	Question Mark, Mourning Cloak
Eastern Redcedar	Juniperus virginiana	Juniper Hairstreak

Common Name	Scientific Name	Butterfly Species
Sweetbay	Magnolia virginiana	Eastern Tiger Swallowtail
Black Cherry	Prunus serotina	Eastern Tiger Swallowtall, Coral Hairstreak, Striped Hairstreak, Red-spotted Purple
Birches	Betula spp.	Red-spotted Purple
Tuliptree	Liriodendron tulipifera	Eastern Tiger Swallowtail
Pines	Pinus spp.	Eastern Pine Elfin
Hackberry	Celtis occidentalis	Hackberry and Tawny Emperors, American Snout, Question Mark, Mourning Cloak
Sassafras	Sassafras albidum	Spicebush Swallowtail
Aspens / Poplars	Populus spp.	Mourning Cloak, Red-spotted Purple, Viceroy, Dreamy Duskywing
Black Locust	Robinia pseudoacacia	Silver-spotted Skipper
Willows	Salix spp.	Mourning Cloak, Viceroy, Red-spotted Purple
	NON-NATIVE HOST	PLANTS
Carrot Family:		
Fennel	Foeniculum vulgare	Black Swallowtail
Dill	Anethum graveolens	Black Swallowtail
Parsley	Petroselinum crispum	Black Swallowtail
Queen Anne's Lace	Daucus carota	Black Swallowtail
Mallow Family:		
Hollyhock	Alcea rosea	Gray Hairstreak
High Mallow	Malva sylvestris 'Zebrina'	Gray Hairstreak
Pea Family:	Many species used	Gray Hairstreak, Eastern Tailed-Blue
Baptisia / False Indigo	Baptisia australis	Silver-spotted Skipper, Wild Indigo Duskywing
Lupines	Lupinis perennis	Wild Indigo Duskywing
Clovers	Trifolium spp.	Orange Sulphur, Clouded Sulphur
Common Rue	ommon Rue Ruta graveolans Glant Swallowtall,	
Snapdragon	Antirrhinum majus	Common Buckeye
Vines:		
Pipevine	Aristolochia macrophylla, durior	Pipevine Swallowtail
Common Hops	Humulus lupulus	Eastern Comma
Shrubs:		
Lilac	Syringa vulgaris	Spicebush Swallowtail
Trees:	Territori Sale como un como sea	
Magnolia	Magnolia spp. (cultivated)	Eastern Tiger Swallowtail

When you purchase plants for butterflies, check with the seller to be SURE that the grower has NOT treated them with systemic insecticides ("neonics")—treated plants will KILL caterpillars and butterflies!

LOOK FOR MORE INFORMATION ABOUT BUTTERFLIES AND BUTTERFLY GARDENING ON THE WEBSITE OF THE NORTH JERSEY BUTTERFLY CLUB:

www.naba.org/chapters/nabanj

Section VIII. Permits Question 5. EDC Hosting Capacity Map at Proposed Location



Section VIII. Permits Question 6. Attachment



Dedicated to Building a Sustainable Future

Advanced Solar Products, Inc. 270 So. Main Street, Ste. 203, Flemington, NJ 08822 **P:** 908-751-5818; **F:** 908-751-5819 www.advancedsolarproducts.com

February 1, 2021

New Jersey Board of Public Utilities Office of Clean Energy Community Solar Energy Pilot Program 44 South Clinton Avenue, 7<sup>th</sup> Floor P.O. Box 350 Trenton, NJ 08625-0350

Dear Office of Clean Energy Staff,

The applicant, Advanced Solar Products, Inc., ("ASP") has submitted an interconnection application for this project but has been notified by PSE&G that the utility will not be reviewing community solar interconnection applications prior to the CS PY2 application deadline of 2/5/21. As a result, we are unable to provide an interconnection study with our application. However, ASP is confident that we will be able to successfully obtain interconnection approval for this project.

ASP, per the BPU's PSE&G Interconnection Study Waiver Board Order released on January 7, 2021, has reviewed the hosting capacity map for this project site and we have confirmed that there is sufficient capacity for the project size being proposed. In addition, ASP has successfully interconnected numerous solar photovoltaic systems of this size within PSE&G territory and we are familiar with the costs required for interconnection and new service connections. These costs have been built in to the project's financial model and despite these costs, the project has been determined to be economically viable.

Regards,

Advanced Solar Products, Inc.

Peter L. Sudano Vice President

Section IX. Community Solar Subscriptions and Subscribers Question 4. Evidence of Experience Serving LMI Communities

#### **CSP LMI Subscription & Management Overview**

CSP is actively managing and maintaining LMI customers across 19 community solar facilities with a combined project capacity of 29.35 MW. The program mix of the above data includes Xcel Energy in Colorado; Dominion Energy in South Carolina; National Grid, Eversource (NSTAR) and WMECO in Massachusetts; PSEG in New Jersey and NYSEG in New York.

Current New Jersey LMI subscription efforts include an additional 2.475 MW of LMI subscribers over 4.5 MW total capacity.

Experience across multiple markets, utilities, and programs is essential to the successful management of LMI portfolios. Adherence to regulatory requirements and reporting requires meticulous data management and monitoring. Many of the above projects have an LMI minimum to be met on a monthly basis, the oldest of which dates to early 2013. In the 8 years of LMI management, CSP has never fallen below the minimum LMI requirement.

Ease of customer enrollment is key to quickly subscribe LMI capacity. CSP's Subscription Engine enables LMI subscribers to self-qualify for participation (eligibility is always verified by the CSP team), and guides them through an easy to use, easy to understand online sign-up that captures all information required to auto-generate their contracts, while allowing them to securely sign their contracts digitally. Their customer data and contracts are digitally stored and accessible via the customer RooflessSavings portal. Once the facility is online, the customer may login to see facility production data, savings to date, invoice and payment information, and pertinent messaging related to their participation. CSP has found that customer access to the RooflessSavings portal is an important tool for on-going customer engagement and retention.

CSP's LMI subscription and management success is also attributable to their relationships with local housing authorities, utility partners, and the LMI subscribers themselves. Subscriber attrition is a real liability for all projects with an LMI requirement, and without these relationships the resubscription effort needed to replace lost capacity can quickly result in a project falling below the LMI threshold requirement. CSP's success in leveraging these relationships to maintain a backlog of waitlisted customers ensures that no project suffers revenue loss due to LMI capacity gaps.

The CSP team was the first in the market to develop, build, and manage community solar facilities in the United States. Their 8-year history in the LMI market across multiple states and utilities is one of (if not the most) robust across the community solar software and management industry.

Section X. Community Engagement Question 3. Attachment



Center for Regenerative Community Solutions (CRCS) a NJ 501(c)(3) Nonprofit Corporation 121 Wawayanda Rd., Highland Lakes, NJ 07422

February 3, 2021

New Jersey Board of Public Utilities 44 Clinton Avenue Trenton, NJ 06825

#### Re: **Community Solar Project** 6 Joanna Drive, East Brunswick

Dear President, Commissioners and Staff,

On behalf of New Jersey PACE and CRCS (our parent organization), I am pleased to inform you that we strongly support the development of the proposed 2.84 MW Community Solar Project to be constructed on the roof of a building located at 6 Joanna Drive, East Brunswick. We believe that the inclusion of a Community Solar facility will help uplift the property by providing green-oriented site improvements and better lighting, and, if warranted by future employee demand, an Electric Vehicle charging station(s).

We understand that the Project will be owned and operated by Navisun LLC, a national investor and owner of Community Solar properties; will be engineered and constructed by Advanced Solar Products Inc., a premier commercial solar developer located in New Jersey and active regionally; and will be managed by Solomon Energy LLC, a leading Community Solar subscription management firm that solicits people to save money on their electric bills (Subscribers), especially low and moderate income (LMI) Subscribers.

We further understand that the Project will be required by the NJ BPU to offer electricity to our low and moderate income (LMI) households at a discount of at least 20%. The Project expects to have about 310 total Subscribers, of which at least 51% must be LMI Subscribers, approximately 160 households. This figure increases to about 235 LMI Subscribers if the owner meets its goal of 75% LMI Subscribers.

We are in full support of this project, and happy to work with the Project leadership to achieve a successful Project and the many benefits it brings to East Brunswick.

Thank you for your consideration.

Jonathan Cloud, Executive Director **New Jersey PACE** 

Section X. Community Engagement Question 4. Attachment Due to the pandemic, efforts to meaningfully communicate with community groups were unsuccessful; none-the-less, we have spoken to some and have learned that here are numerous nonprofits, social-service entities and religious institutions that know of the Community Solar program and are interested in making it a success in their communities. If awarded, we will continue to reach out to them and will engage the project Subscriber Manager to do the same.

Section XI. Project Cost Question 1. Attachment



Section XII. Other Benefits Question 4. Attachment



Joseph V. Egan Business Manager

## Local Union No. 456

International Brotherhood of Electrical Workers

1295 Livingston Avenue, North Brunswick, New Jersey 08902 (732) 246 2122 • Fax (732) 246 8076

February 1, 2021

New Jersey Board of Public Utilities Office of Clean Energy Community Solar Energy Pilot Program 44 South Clinton Avenue, 7<sup>th</sup> Floor P.O. Box 350 Trenton, NJ 08625-0350

Dear Office of Clean Energy Staff,

Please accept this letter as a demonstration of IBEW Local 456's full support for the 2.5 MW GRM – East Brunswick rooftop solar PV system being proposed by Advanced Solar Products, Inc. and Navisun, LLC under Year 2 of the NJBPU's Community Solar Pilot Program. This project will benefit the local community by encouraging the use of renewable energy, providing access to discounted electricity for low-and moderate-income residents, and increasing the number of local jobs in the community while this PV system is being built.

As an official of I.B.E.W. Local 456 serving Middlesex County NJ, I am proud that this PV system will be built using local union labor. For a PV system of this size, we expect that a total of approximately 15 – 20 union jobs will be created for a period of up to 6 months. These jobs will include



electrical journeymen and apprentices, etc. In addition to job creation, our union also provides job training opportunities through apprenticeship programs and on the job learning. These opportunities will also be provided during the GRM – East Brunswick project.

Local 456 will be proud to provide highly skilled and trained, local labor to build the GRM – East Brunswick rooftop solar PV system if it is accepted into the BPU's Community Solar Program Year 2 and we fully lend our support to this exiting project.

Please feel free to contact me with any questions you may have.

Regards,

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Joseph V. Egan Business Manager IBEW Local 456