GREENSVILLE COUNTY PLANNING COMMISSION
AGENDA

MEETING WILL BE HELD AT GOLDEN LEAF COMMONS

TUESDAY, SEPTEMBER 11, 2018

6:00 P.M.

I. CALL TO ORDER

II. ROLL CALL

III. APPROVAL OF AGENDA

IV. APPROVAL OF MINUTES

A. Approval of Minutes – See Attachment – A.

V. PUBLIC HEARING

A. SP-8-18 – Bill and Robin Tudor – See Attachment – B.

VI. REGULAR SESSION

A. SP-8-18 – Bill and Robin Tudor

VII. OLD BUSINESS

A. SP-6-18 – Greensville County Solar Project/Tradewind Energy – See Attachment – C. This item was deferred from the August 28, 2018 meeting to determine if an agreement between the County and the Applicant could be reached regarding security issues related to the decommissioning process. Discussions have been held with representatives of Tradewind Energy and additional information will be provided at the meeting.

VIII. PUBLIC HEARING

A. SP-5-18 – Meherrin Solar Project/Solunesco – See Attachment – D.

IX. REGULAR SESSION

A. SP-5-18 – Meherrin Solar Project/Solunesco

X. ADJOURN

ATTACHMENT A

The Greensville County Planning Commission meeting was held Tuesday, August 28, 2018, 6:00 P.M., at the Greensville County Government Building, 1781 Greensville County Circle, Emporia, Virginia.

PRESENT
Walter Robinson, Vice-Chairman
Stephen Allen
Lofton Allen
Annie Odom
Dianne Barnes-Rhoades
Jeff Robinson

ABSENT
Joe Antorn, Jr.
Linwood E. Pope, Jr.
Peggy Wiley

STAFF PRESENT
Russell Slayton, County Attorney
Katherine Howerton
Treva Pernell

OTHERS PRESENT
Darren Coffey
Justin McGeeney
Emily Trubner
Tom Terrell
Dr. Michael Anderson
Sheila Ferguson
Rev. James Parham, Jr.
James Ferguson

Vice-Chairman Robinson called the meeting of Tuesday, August 28, 2018 to order. Mr. Robinson stated that the Commission would start the meeting with prayer. He called on Commissioner Jeff Robinson to offer prayer. The secretary called the roll.

In Re: APPROVAL OF THE AGENDA

Vice-Chairman Robinson entertained a motion for approval of the agenda. Commissioner Rhoades made the motion, seconded by Mr. Lofton Allen, with all voting aye, motion carried.

In Re: APPROVAL OF THE MINUTES

Vice-Chairman Robinson entertained a motion to approve the minutes of June 12, 2018. Commissioner Jeff Robinson made a motion, seconded by Commissioner Rhoades, with all voting aye, motion carried.

Vice-Chairman Robinson entertained a motion to go into Public Hearing. Commissioner Odom made the motion, seconded by Commissioner Jeff Robinson, with all voting aye, to go into Public Hearing.

In Re: PUBLIC HEARING

ZTA-1-18 Lisa M. Crickenberger

Katherine Howerton greeted the Commission. She stated that the first case was ZTA-1-18 which is a zoning text amendment that will be tied together with the next case, SP-7-18. She also stated that the applicant, Lisa M. Crickenberger desired to amend Aritcle 4: PERMITTED USES IN PRIMARY ZONING DISTRICTS, Table 4.1 Use Table to include the following use:

Pet shop/dog parlor

The purpose of Article 4 is to establish permitted uses in primary zoning districts. To accomplish this purpose, Table 4.1 Permitted Use Table establishes the uses of land, buildings, or structures that are permitted in Greensville County under this Ordinance, and stipulates the zoning district, or districts, in which each use is permitted.

RETAIL COMMERCIAL & SERVICES	
A-1	U
B-1	R
B-2	R

The applicant also desires to amend Article 23: DEFINITIONS to include the following:

- 23-2-98.1a Pet Shop/dog beauty parlor, provided that any work rooms, cages, pens or kennels be maintained within a completely enclosed, soundproof building and that such shop or parlor be operated in such a way as to produce no objectionable noise or odors outside its walls.

The proposed changes to the Permitted Use Table (Table 4.1) will allow the establishment of a Pet Shop/Dog Parlor project only with the issuance of a Special Use Permit approved by the Board of Supervisors in an A-1. Agricultural District. The proposed pet shop/dog parlor will be allowed in the B-1, Retail Business District and the B-2. General Commercial District by right.

Mrs. Howerton stated that the proposed amendment has been shown to be compatible with the goals and objectives of the Greensville County Comprehensive Plan as well as County Zoning Ordinance. Therefore, staff recommends approval of this request.

SP-7-18 – Lisa M. Crickenberger

Mrs. Howerton stated the applicant is Lisa M. Crickenberger and the owners of the property are Tony Clements and James Woodruff. It is 6.48 acres located on Allen Town Road in an A-1 Agricultural district. The applicant requests to establish a pet shop/dog parlor business at 239 Allen Town Road.

Mrs. Howerton stated that staff recommends approval of this request with the conditions listed.

1. Special Use Permit is granted to Lisa M. Crickenberger for the establishment of a pet shop/dog parlor on property located on Greensville County Tax Map 26, Parcel 29D.

2. Applicant shall develop and maintain the property in accordance with all applicable local, state, and federal rules, regulations, ordinances, and laws.

3. Upon evaluation of an engineer, obtain a Building Permit for the existing structure in order to comply with any local and state codes in regards to "Business Occupancy".

4. Submit to any inspections or structural requirements necessary to convert the storage building into a retail/commercial business.

5. Employees shall be limited to the present applicant and one (1) full time employee.

6. Applicant shall provide the County with copies of all local and state permits.

7. Operation of the business shall be as the applicant stated in the application; 9:00 a.m. to 5:00 p.m.

8. No outside storage of animals or supplies is permitted.

9. Adhere to all requirements of the Greensville/Emporia Health Department.

10. Signage is subject to Article 15-3-2 (e). The locations of the sign is subject to VDOT approval.

11. Utilizing this permit issuance date as the annual date, if the proposed use is not established within two (2) years, or is abandoned for two (2) consecutive years, this permit will be automatically terminated.

12. Failure to abide by the above condition may result in the revocation of this Special Use Permit.

Ms. Lisa M. Crickenberger and Mr. Tony Clements addressed the Commission. She stated that there is a free standing building on the property that she will use for her business. Mr. Clements stated that the existing driveway is located on his property and will be used for this business.

ZTA-2-18 Little Shiloh Baptist Church

Mrs. Howerton stated that the applicant, Little Shiloh Baptist Church, desires to amend Article 15-4-6 of the Greensville County Zoning Ordinance to allow the installation of Electronic Message boards. She stated that when this Article was adopted more than 25 years ago, Electronic Message Boards had not been invented.

Mrs. Howerton stated that Staff research indicates that there are four types of Electronic Message Display Boards available on the market today. She stated that Staff feels that these message boards should only be allowed through the issuance of a Special Use Permit.

Mrs. Howerton stated that Staff recommends deleting Article 15-4-6 and adding a new Article as follows:

15-4A SIGN REGULATIONS FOR ELECTONIC SIGNS

15-4A-1 STATIC DISPLAY (Message Changed with no Transition)
A. Definitions:

ELECTRONIC MESSAGE DISPLAY – A sign capable of displaying words, symbols, figures or images that can be electronically or mechanically changed by remote or automatic means.

B. Permitted Locations:

Electronic Message Displays may be permitted with the approval of a special use permit in the A-1, Agricultural, M-1 Industrial, B-1 Business & B-2 Business Zoning Districts subject to the following requirements:

C. Operational Limitations:

Such displays shall contain static messages only, and shall not have movement, or the appearance or optical illusion of movement, of any part of the sign structure, design, or pictorial segment of the sign, including the movement or appearance of movement of any illumination or the flashing, scintillating or varying of light intensity.

D. Minimum Display Time:

Each message on the sign must be displayed for a minimum of 15 seconds.

E. Message Change Sequence:

The change of messages must be accomplished immediately.

F. Permitted Size and Location of Signs:

The location and size of electronic message displays must conform to Article 15-3-2 and Article 15-3-3 of the Greensville County Zoning Ordinance.

15-4A-2 STATIC DISPLAY (Fade/Dissolve Transitions)

A. Definitions :

ELECTRONIC MESSAGE DISPLAY – A sign capable of displaying words, symbols, figures or images that can be electronically or mechanically changed by remote or automatic means.
DISSOLVE – a mode of message transition on an Electronic Message Display accomplished by varying the light intensity or pattern, where the first message gradually appears to dissipate and lose legibility simultaneously with the gradual appearance and legibility of the second message.
FADE – a mode of message transition on an Electronic Message Display accomplished by varying the light intensity, where the first message gradually reduces intensity to the point of not being legible and the subsequent message gradually increases intensity to the point of legibility.
FRAME – a complete, static display screen on an Electronic Message Display.
FRAME EFFECT – a visual effect on an Electronic Message Display applied to a single frame to attract the attention of viewers.
TRANSITION – a visual effect used on an Electronic Message Display to change from one message to another.

B. Permitted Locations:

Electronic Message Displays may be permitted with the approval of a special use permit in the A-1, Agricultural, M-1 Industrial, B-1 Business & B-2 Business Zoning Districts subject to the following requirements:

C. Operational Limitations:

Such displays shall contain static messages only, changed only through dissolve or fade transitions, or with the use of other subtle transitions and frame effects that do not have the appearance of moving text or images, but which may otherwise not have movement, or the appearance or optical illusion of movement, of any part of the sign structure, design, or pictorial segment of the sign, including the movement of any illumination or the flashing, scintillating or varying of light intensity.

D. Minimum Display Time:

Each message on the sign must be displayed for a minimum of 15 seconds.

E. Permitted Size and Location of Signs:

The location and size of electronic message displays must conform to Article 15-3-2 and Article 15-3-3 of the Greensville County Zoning Ordinance.

15-4A-3 STATIC DISPLAY (Travel/Scroll Transitions and Animations)

A. Definitions:

ELECTRONIC MESSAGE DISPLAY – A sign capable of displaying words, symbols, figures or images that can be electronically or mechanically changed by remote or automatic means.

DISSOLVE – a mode of message transition on an Electronic Message Display accomplished by varying the light intensity or pattern, where the first message gradually appears to dissipate and lose legibility simultaneously with the gradual appearance and legibility of the second message.
FADE – a mode of message transition on an Electronic Message Display accomplished by varying the light intensity, where the first message gradually reduces intensity to the point of not being legible and the subsequent message gradually increases intensity to the point of legibility.
FRAME – a complete, static display screen on an Electronic Message Display.
FRAME EFFECT – a visual effect on an Electronic Message Display applied to a single frame to attract the attention of viewers.
SCROLL – a mode of message transition on an Electronic Message Display where the message appears to move vertically across the display surface.
TRANSITION – a visual effect used on an Electronic Message Display to change from one message to another.
TRAVEL – a mode of message transition on an Electronic Message Display where the message appears to move horizontally across the display surface.
B. Permitted Locations:
Electronic Message Displays may be permitted with the approval of a special use permit in the A-1, Agricultural, M-1 Industrial, B-1 Business & B-2 Business zoning districts subject to the following requirements:

C. Operational Limitations:

Such displays shall be limited to static displays, messages that appear or disappear from the display through dissolve, fade, travel or scroll modes, or similar transitions and frame effects that have text, animated graphics or images that appear to move or change in size, or be revealed sequentially rather than all at once.

D. Minimum Display Time:

Each message on the sign must be displayed for a minimum of 15 seconds.

E. Permitted Size and Location of Signs:

The location and size of electronic message displays must conform to Article 15-3-2 and Article 15-3-3 of the Greensville County Zoning Ordinance.

15-4A-4 VIDEO/ANIMATION ELECTRONIC MESSAGE DISPLAY
a. Definitions :

VIDEO/ANIMATION ELECTRONIC MESSAGE DISPLAY – A sign capable of displaying words, symbols, figures or images that can be electronically or mechanically changed by remote or automatic means, including animated graphics and video.

b. Permitted Locations: Video/Animation Electronic Message Displays are not allowed within any zoning district.

Mr. Morris Prince, agent for Little Shiloh Baptist Church, greeted the Commission and stated that he wanted to speak on behalf of the church members. He stated that the church had been without a sign since construction of the new road was begun in front of their church. The

members have decided to install a new sign to identify their church and encourage new membership.

Commissioner Lofton Allen asked if there was a rule that would not allow flashing signs in the County. County Attorney, Russell Slayton, stated that this could be investigated.

Vice-Chairman Robinson entertained a motion to go into Regular session in order to make decisions on the first three items on the agenda. Commission Stephen Allen made a motion, seconded by Commission Rhoades, with all voting aye, motion carried.

In Re: REGULAR SESSION

A. ZTA-1-18 – Lisa M. Crickenberger

Commissioner Jeff Robinson made a motion that ZTA-1-18 – Lisa M. Crickenberger be approved as outlined in the Staff Report and forward recommendation to the Board of Supervisors, seconded by Commissioner Rhoades, with all voting aye, motion carried. Commissioner Steve Allen abstained from voting, he was related to members of the applicant's family.

B. SP-7-18 – Lisa M. Crickenberger

Commissioner Rhoades made a motion that the application for SP-7-18 Lisa M. Crickenberger be approved with conditions as outlined in the Staff Report and forward recommendation to the Board of Supervisors, seconded by Commissioner Jeff Robinson, with all voting aye, motion carried.

C. ZTA-2-18 – Little Shiloh Baptist Church

Vice-Chairman Robinson entertained a motion. Commissioner Rhoades made a motion to approve ZTA-2-18 – Little Shiloh Baptist Church as outlined in the Staff Report; subject to confirmation from the Virginia Department of Transportation that there is no conflict with State law, seconded by Commissioner Steve Allen, with all voting aye, motion carried.

D. ZTA-3-18 – Greensville County Board of Zoning Appeals

Vice-Chairman Robinson entertained a motion. Commissioner Steve Allen made a motion to defer ZTA-3-18 until the October 9, 2018 meeting, seconded by Commissioner Odom, with all voting aye, motion carried.

Vice-Chairman Robinson entertained a motion to go back into Public Hearing. Commissioner Steve Allen made a motion, seconded by Commissioner Jeff Robinson, with all voting aye, motion carried.

In Re: PUBLIC HEARING

E. SP-6-18 – Greensville County Solar Project/Tradewind Energy

Mr. Russell Slayton, County Attorney, recited the Protocol for Speakers at Public Hearing as follows:

The Planning Commission has developed a protocol for tonight's meeting to ensure that the meeting is productive and efficient, and that proper decorum is maintained. The Planning Commission wants to emphasize that this protocol is intended to make the public hearing as productive as possible.
The speaker protocol for this evening's public hearing is as follows:

1. Each speaker will be given three minutes to address the Planning Commission. The time limit will be strictly enforced.

2. Each speaker will be signaled when two of the three minutes have elapsed.

3. Each speaker will be signaled when his/her three minutes have elapsed.

4. Each speaker will be permitted to address the Planning Commission only once; i.e., the three-minute opportunity to speak cannot be transferred from one speaker to another.

5. Speakers should face the Planning Commission and address their comments to the Planning Commission, and not to others who are present at the meeting. Speakers should not turn to face and address members of the audience.

6. The Planning Commission is conducting this public hearing to receive comments from interested parties, so neither the Planning Commission nor its staff will respond to questions during the public hearing, and neither the Planning Commission nor its staff will engage in a dialogue with speakers.

7. The Planning Commission's decisions are based on land use principles, so speakers are encouraged to make comments relevant to land use issues. Comments concerning the principles governing the Planning Commission's decisions will be provided.

8. The Planning Commission asks that everyone at this evening's meeting be respectful to the others who are here.

9. The Planning Commission will have the right to ask questions of the applicant during the Planning Commission's deliberations on the application.

Vice-Chairman Robinson asked the agent for SP-6-18 Tradewind Energy to come forward to address the Commission.

Mr. Justin McGeeney, the project manager for Tradewind Energy, addressed the Commission. He stated that the Greensville County Solar Project would certainly be included in growing toward new horizons in the County. He also stated that the GCSP is an 80 megawatt project consisting of approximately 100 acres just south of Emporia. It is not visible to nearby

occupied residences, it has a significant amount of vegetation buffering the project and is flat and open which will require minimal site preparation. He further stated that there is an 115kV transmission line that travels through the site. This site is very compatible with the County's Land Use Guidance. He also stated that commercial operations are scheduled to begin December 1, 2020 pending completion of development activities and execution of commercial agreement with the utility.

Mr. McGeeney stated that since the Planning Commission had determined that this project was substantially in accord with the County's Comprehensive Plan in June 2018, Tradewind has established Timber Preservation Agreements with Project landowners to ensure a 50' buffer of existing timber will be maintained around the perimeter of the Project.

Mr. McGeeney stated that lease agreements for the Project mandate that the Project/Lessee remove all generation facilities and restore the property to a condition reasonable similar to its condition on the effective date. He stated that the Project is committed to providing reasonable security to ensure proper decommissioning. He also stated that he was not aware of any solar project that could support 100% cash security without recognizing salvage value. He further stated that 100% cash security would not allow the project to move forward.

Mr. McGeeney stated that the Greensville County Solar Project is a $90,000,000 investment and there are significant, positive economic impacts such as the County receiving an estimated $155,556 in property taxes the first year. He stated that there will be no additional police or schools needed and there will be no new stress on the local infrastructure or sewer.

Mr. Tom Terrell, attorney for Tradewind Energy, addressed the Commission. He respectfully requested that the Planning Commission recommend this project but subject to Tradewind Energy coming back and discussing with Staff something completely satisfactory to Staff but not the same as 100% cash security. He stated that a combination of items, cash, bond, salvage value, etc. would be acceptable so as not to tie up all the operating capital.

Emily Trubner, Environmental Manager for the GCSP, addressed the Commission. She stated that Tradewind Energy is a responsible steward of the environment and wildlife. She also stated that this project has been designed to minimize the impact on natural resources through responsible siting, extensive due diligence, informed project design and best management practices. She further stated that the project will avoid environmentally sensitive areas including wetlands, floodplains and steep slopes. She stated that after completed construction, the site will be re-vegetated with a mix of native grasses and that a pollution prevention plan will reduce the agricultural runoff and nutrient loading to nearby waterways.

Ms. Trubner stated that the Greensville County Solar Project is required by law to obtain a permit from the Department of Environmental Quality. It is a thorough review by the County, DEQ and sister agencies that will inspect the grading plan, E & S plan, and Storm Water Pollution Prevention Plan.

Mr. Russell Slayton, County Attorney, addressed the Commission and stated that the County Staff had been impressed with Tradewind Energy. He stated that the Staff had been instructed to think how the County's interest could best be protected. He stated that the decommissioning of these solar panels bring up several questions. When installed, are they considered personal property or real estate, who owns the solar panels? Who has the right to sell

them? He stated that what has been done in other localities is not necessarily in the best interest of Greensville County.

Mr. Slayton stated that the decommissioning of these panels 30 to 40 years from now presents a serious challenge. He stated that security needs to be in place and that it was not the Staff's recommendation to accept salvage or bonds.

Mr. Darren Coffey stated that the land uses related to the Greensville County Solar Project are as follows:

That the uses permitted by such exception are necessary or desirable and are appropriate with respect to the primary purpose of the development.

That the uses permitted by such exception are not of such a nature or located so as to exercise a detrimental influence on the surrounding neighborhood.

If a use is not specifically enumerated in the zoning ordinance by-right, special exception, or special use in any district, then the planning commission may recommend and the Board of Supervisors may authorize such use. Nothing contained in this section shall be construed to permit the approval of any use specifically prohibited.

The use shall be designed or arranged on the land in such a way as to cause no more adverse impact on the adjacent property, and/or the neighborhood than might be caused by the least restrictive use otherwise permitted by right in the district.

The use shall comply with all licensing requirements, if any, of any County, State or Federal government or agency.

The use shall not be operated as to cause a nuisance to the neighborhood in which it is located.

Mr. Coffey stated that as part of the 2232 Review Process, Staff flagged three main issues that it wanted to see better addressed during the Special Use Permit process; buffers/screening, a grading plan and a decommissioning plan with a cash escrow security.

Mr. Coffey stated that concerning the property value issue, Pearson's Appraisal Service, Inc. was asked their opinion on the impact of solar projects on property values. He stated that Pearson's Appraisal Service found no negative impacts to property values.

Mr. Coffey stated that there are nine conditions with sub conditions.

If the Planning Commission determines that the application furthers the Comprehensive Plan's goals and objectives and that it meets the criteria set forth in the Zoning Ordinance, then staff recommends the conditions.

1. The Applicant will develop the Solar Facility in substantial accord with the Conceptual Site Plan dated May 3, 2018 included with the application as determined by the Zoning Administrator (ZA). Significant deviations or additions, including any enclosed building structures to the

Preliminary Site Plan will require review and approval by the Planning Commission and Board of Supervisors.

2. In addition to all Virginia site plan requirements and site plan requirements of the Zoning Administrator, the Applicant shall provide the following plans for review and approval for the Solar Facility prior to the issuance of a building permit:

a. Construction Management Plan. The Applicant shall prepare a "Construction Management Plan" for each applicable site plan for the Solar Facility, and each plan shall address the following:

i. Traffic control methods (in coordination with the Virginia Department of Transportation [VDOT] prior to initiation of construction): i. Lane closures, ii. Signage, and iii. Flagging procedures.

ii. Site access planning. Directing employee and delivery traffic to minimize conflicts with local traffic.

iii. Fencing. The Applicant shall install temporary security fencing prior to the commencement of construction activities occurring on the Solar Facility project.

iv. Lighting. During construction of the Solar Facility, any temporary construction lighting shall be positioned downward, inward, and shielded to eliminate glare from all adjacent properties. Emergency and/or safety lighting shall be exempt from this construction lighting condition.

b. Construction Mitigation Plan. The Applicant shall prepare a "Construction Mitigation Plan" for each applicable site plan for the Solar Facility to the satisfaction of the Zoning Administrator. Each plan shall address, at a minimum, the effective mitigation of dust, any burning operations, hours of construction activity, access and road improvements, and handling of general construction complaints.

c. Grading plan. The Project shall be constructed in compliance with the County approved grading plan as determined and approved by the Zoning Administrator or his designee prior to the commencement of any construction activities and a bond or other security will be posted for the grading operations The grading plan shall:

i. clearly show existing and proposed contours;

ii. note the locations and amount of topsoil to be removed (if any) and the percent of the site to be graded;

iii. Limit grading to the greatest extent practicable by avoiding steep slopes and laying out arrays parallel to landforms;

iv. An earthwork balance will be achieved on-site with no import or export of soil;

v. In areas proposed to be permanent access roads which will receive gravel or in any areas where more than a few inches of cut are required, topsoil will first be stripped and stockpiled on-site to be used to increase the fertility of areas intended to be seeded;

vi. Take advantage of natural flow patterns in drainage design and keep the amount of impervious surface as low as possible to reduce storm water storage needs.

d. Erosion and Sediment Control Plan. The County will have a third-party review with corrections completed prior to submittal for DEQ review and approval. The owner or operator shall construct, maintain and operate the project in compliance with the approved plan. An E&S bond (or other security) will be posted for the construction portion of the project.

e. Storm Water Management Plan. The County will have a third-party review with corrections completed prior to submittal for DEQ review and approval. The owner or operator shall construct, maintain and operate the project in compliance with the approved plan. A storm water control bond (or other security) will be posted for the project for both construction and post construction as applicable and determined by the Zoning Administrator.

f. Project Screening and Vegetation Plan. The owner or operator shall construct, maintain and operate the facility in compliance with the approved plan. A separate security shall be posted for the ongoing maintenance of the project's vegetative buffers in an amount deemed sufficient by the Zoning Administrator.

g. The Applicant will compensate the County in obtaining an independent third-party review of any site plans or construction plans or part thereof.

h. The design, installation, maintenance and repair of the Solar Facility in accordance with the most current National Electrical Code (NFPA 70) available (2014 version or later as applicable).

3. Operations.

a. Permanent Security Fence. The Applicant shall install a permanent security fence, consisting of chain link, two-inch square mesh, six (6) feet in height, surmounted by three strands of barbed wire, around the Solar Facility project prior to the commencement of operations of the Solar Facility. Failure to maintain the fence in a good and functional condition will result in revocation of the permit.

b. Lighting. Any on-site lighting provided for the operational phase of the Solar Facility shall be dark-sky compliant, shielded away from adjacent properties, and positioned downward to minimize light spillage onto adjacent properties.

c. Noise. Daytime noise will be under 67dBA during the day with no noise emissions at night.

d. Ingress/Egress. Permanent access roads and parking areas will be stabilized with gravel, asphalt or concrete to minimize dust and impacts to adjacent properties.

4. Buffers.

i. Setbacks. A minimum one-hundred fifty (150) foot setback, which includes a 50-foot planted buffer as described below, shall be maintained from the street line (edge of right of way) where the Property abuts any public right-of-way.

ii. A minimum one-hundred fifty (150) foot setback, which includes a 50-foot planted buffer as described below, from any adjoining property line that is improved with a single family residence.

a. Screening. A minimum fifty (50) foot vegetative buffer (consisting of existing trees and vegetation) shall be maintained. If there is no existing vegetation or if the existing vegetation is inadequate to serve as a buffer as determined by the Zoning Administrator, a triple row of trees/shrubs will be planted on approximately 10-foot centers in the 25 feet immediately adjacent to the security fence. New plantings of trees and shrubs shall be approximately 6 foot in height at time of planting. In addition, pine seedlings will be installed in the remaining 25 feet of the 50-foot buffer. Ancillary project facilities may be included in the buffer as described in the application where such facilities do not interfere with the effectiveness of the buffer as determined by the Zoning Administrator.

b. Wildlife corridors. The Applicant shall identify an access corridor for wildlife to navigate through the Solar Facility. The proposed wildlife corridor shall be shown on the site plan submitted to the County. Areas between fencing shall be kept open to allow for the movement of migratory animals and other wildlife.

5. Height of Structures. Solar facility structures shall not exceed 10', however, towers constructed for electrical lines may exceed the maximum permitted height as provided in the A-1 Agricultural zoning district regulations (§16-2), provided that no structure shall exceed the height of 25 feet above ground level.

6. Inspections. The Applicant will allow designated County representatives or employees access to the facility at any time for inspection or other County-related business purposes.

7. Training. The Applicant shall arrange a training session with the Greensville County Fire Department to familiarize personnel with issues unique to a solar facility before operations begin.

8. Compliance. The Solar Facility shall be designed, constructed, and tested to meet relevant local, state, and federal standards as applicable.

9. Decommissioning.

a. Decommissioning Plan. No decommissioning plan has been provided at this time. The Applicant shall submit a decommissioning plan to the County for approval prior to the issuance of any permits. The purpose of the decommissioning plan is to specify the procedure by which the Applicant or its successor would remove the Solar Facility after the end of its useful life and to restore the property for agricultural uses.

b. Decommissioning Cost Estimate. No decommissioning cost estimate has been provided at this time. The decommissioning plan shall include a decommissioning cost estimate prepared by a Virginia licensed professional engineer.

i. The cost estimate shall provide the gross estimated cost to decommission the Solar Facility in accordance with the decommissioning plan and these conditions. The

decommissioning cost estimate shall not include any estimates or offsets for the resale or salvage values of the Solar Facility equipment and materials.
ii. The Applicant, or its successor, shall reimburse the County for an independent review and analysis by a licensed engineer of the initial decommissioning cost estimate.

iii. The Applicant, or its successor, will update the decommissioning cost estimate every five (5) years and reimburse the County for an independent review and analysis by a licensed engineer of each decommissioning cost estimate revision.

c. Security

i. Prior to the approval of the decommissioning plan, the Applicant shall provide an amount equal to the decommissioning cost estimate as security for the decommissioning of the Solar Facility.

ii. The security shall be in the form of cash to be held by an escrow agent at a financial institution acceptable to the County pursuant to a mutually acceptable escrow agreement. Upon written request, the Board of Supervisors accept other forms of security, provided that such form of security adequately protects the interests of the County and the public upon a default of the Applicant's obligations to decommission the Solar Facility.

iii. Upon the receipt of the first revised decommissioning cost estimate (following the 5th anniversary), any increase or decrease in the decommissioning security shall be funded by the Applicant, or refunded to Applicant (if permissible by the form of security), within ninety (90) days and will be similarly trued up for every subsequent five year updated decommissioning cost estimate.

iv. The security must be received prior to the final building inspection and issuance of any final permit to operate the Solar Facility and must stay in force for the duration of the life span of the Solar Facility and until all decommissioning is completed. If the County receives notice or reasonably believes that any form of security has been revoked or the County receives notice that any security may be revoked, the County may revoke the special use permit and shall be entitled to take all action to obtain the rights to the form of security.

d. Applicant/Property Owner Obligation. Within six (6) months after the cessation of use of the Solar Facility for electrical power generation or transmission, the Applicant or its successor, at its sole cost and expense, shall decommission the Solar Facility in accordance with the decommissioning plan approved by the County. If the Applicant or its successor fails to timely decommission the Solar Facility, the property owners shall commence decommissioning activities in accordance with the decommissioning plan. Following the completion of decommissioning of the entire Solar Facility arising out of a default by the Applicant or its successor, any remaining security funds held by the County shall be distributed to the property owners in a proportion of the security funds and the property owner's acreage ownership of the Solar Facility.

e. Applicant/Property Owner Default; Decommissioning by the County.

i. If the Applicant, its successor, or the property owners fail to timely decommission the Solar Facility, the County shall have the right, but not the obligation, to commence decommissioning activities and shall have access to the property, access to the full amount of the decommissioning security, and the rights to the Solar Facility equipment and materials on the property.

ii. If applicable, any excess decommissioning security funds shall be returned to the current owner of the property after the County has completed the decommissioning activities.

iii. Prior to the issuance of any permits, the Applicant and the property owners shall deliver a legal instrument to the County granting the County (1) the right to access the property, and (2) an interest in the Solar Facility equipment and materials to complete the decommissioning upon the Applicant's and property owner's default. Such instrument(s) shall bind the Applicant and property owners and their successors, heirs, and assigns. Nothing herein shall limit other rights or remedies that may be available to the County to enforce the obligations of the Applicant, including under the County's zoning powers.

f. Equipment/building removal. All physical improvements, materials, and equipment related to solar energy generation, both surface and subsurface components, shall be removed in their entirety. The soil grade will also be restored following disturbance caused in the removal process. Perimeter fencing will be removed and recycled or re-used. Where the current or future landowner prefers to retain the fencing, these portions of fence would be left in place.

g. Infrastructure removal. All access roads will be removed, including any geotextile material beneath the roads and granular material. The exception to removal of the access roads and associated culverts or their related material would be upon written request from the current or future landowner to leave all or a portion of these facilities in place for use by that landowner. Access roads will be removed within areas that were previously used for agricultural purposes and topsoil will be redistributed to provide substantially similar growing media as was present within the areas prior to site disturbance.

h. Partial Decommissioning. If decommissioning is triggered for a portion, but not the entire Solar Facility, then the Applicant or its successor will commence and complete decommissioning, in accordance with the decommissioning plan, for the applicable portion of the Solar Facility; the remaining portion of the Solar Facility would continue to be subject to the decommissioning plan. Any reference to decommissioning the Solar Facility shall include the obligation to decommission all or a portion of the Solar Facility whichever is applicable with respect to a particular situation.

Vice-Chairman Robinson asked if anyone present would like to speak.

Dr. Mike Anderson came forward representing the Greensville Memorial Foundation. He stated that this project provides several advantages to the County. It provides renewable energy, income, good use of County land and for the Foundation it will provide a source of income so that it can improve the health of this community. He also stated that every penny that comes to the Foundation through this project will go back into this community.

Mrs. Sheila Ferguson greeted the Commission. She stated that she wanted to address the decommissioning issue. She stated that she would like the County leaders to work with the solar companies to establish reasonable requirements for decommissioning so as not to rule out the possibilities of solar projects. She further stated that she urges our County leaders to focus on the potential opportunities and vote in favor of solar power for Greensville County.

Rev. James Parham, Jr. greeted the Commission. He stated that his family has owned land in the County since 1903. He stated that he was in favor of this project, however, he had a concerns about the property values in the immediate area of this project. He asked how this project will impact property values in the future. He asked that the Planning Commission look at all factors before making a decision.

Mr. James Ferguson greeted the Commission and stated that he was one of the property owners involved with the Greensville County Solar Project. He stated that he is requesting the Commission recommend this project to the Board of Supervisors.

Commissioner Jeff Robinson stated that he was comfortable with the project and the location from the beginning. He stated that the buffers are one of his main concerns. He also stated that he would like to have any adjoining property line (participating or not) included in the minimum one-hundred fifty (150) foot setback, not only ones that were improved with a single-family residence.

Commissioner Steve Allen asked if a ground water impact study had been done for these panel posts being installed in the ground. He asked from what metal were they constructed.

Tom Terrell answered his question by stating that the post are constructed of galvanized steel. He stated that there are no health hazards from the zinc in this metal.

Justin McGeeney stated that all federal and state guidelines will be followed.

Vice-Chairman Robinson stated that this project is causing so much concern because this is the first one in front of the Commission and is the template for all those that come after. He stated that the Commission has to get this right before recommending it to the Board of Supervisors.

Commissioner Steve Allen made a motion that the wording be changed in the Staff Report under Number 4 on Page 11, Buffers; ii. to state a minimum one-hundred fifty (150) foot setback, which includes a 50-foot planted buffer as described below, from any adjoining property line. Second made by Commissioner Rhoades, with all voting aye, motion carried.

Vice-Chairman Robinson entertained a motion. Commissioner Rhoades made a motion to defer the Planning Commission decision on the Greensville County Solar Project, LLC's request regarding its proposed 80-megawatt photovoltaic solar energy facility SP-6-18 until the Commission's next meeting scheduled to begin at 6:00 p.m. on September 11, 2018, in the Board of Supervisors meeting room. Second made by Commissioner Lofton Allen, with all voting aye, motion carried.

In Re: OTHER MATTERS

Greensville County Planning and Zoning Fees Revision

Mrs. Howerton stated that the Greensville County Board of Supervisors authorized staff during their July 2, 2018 meeting, by Resolution #19-04, to revise the Planning and Zoning Fees collected by the County.

Mrs. Howerton advised that staff had researched all surrounding counties and staff recommends emulating Brunswick County's Planning and Zoning Fee schedule.

Vice-Chairman Robinson entertained a motion. Commissioner Jeff Robinson made a motion to approve the revised Planning and Zoning Fee schedule, seconded by Commissioner Rhoades, with all voting aye, motion carried.

In Re: ADJOURN

There being no other discussions, Commissioner Odom made a motion to adjourn, seconded by Commissioner Jeff Robinson, with all voting aye, motion carried and meeting was adjourned.

_____

Walter Robinson, Vice-Chairman

STAFF REPORT

SP-8-18

OVERVIEW

APPLICANT/OWNER	Bill & Robin Tudor
TAX MAP	42-2-1A
ACREAGE	7 acres
LOCATION	Southside of Brink Road (State Route 627), approximately 7.5 miles from Brink Rd. (St. Rt. 627)/Main St. (HWY 301S) intersection.
ELECTION DISTRICT	02, Hicksford
EXISTING ZONING	A-1, Agricultural
EXISTING USE	Residential
REQUEST	To set up a single wide mobile home for provisional care for Mrs. Anne M. Harris (Mother), on a temporary basis.
ADJACENT ZONING	A-1. Agricultural
PREVIOUS ZONING ACTIVITY	None
CHARACTER OF AREA	Low density residential

NATURAL CONDITIONS	220' ± Elevation
GREENSVILLE COUNTY COMPREHENSIVE PLAN (THE PLAN)	Low density residential/agricultural

DIRECTOR'S COMMENTS

The applicant seeks approval to place a temporary manufactured home upon their family's property to provide assistance to the wife's mother (Mrs. Anne M. Harris) given the nature of her health.

The subject property is located within a Rural Development Area of the County. The property is zoned A-1 Agricultural. The Agricultural Zoning District is designed to protect the existing rural conditions and to encourage only that future development which promotes the preservation of the rural qualities of the County. Properties located within the immediate area are used primarily for agricultural purposes and contains low density residential development.

In an effort to determine if a particular case warrants approval, we must first look at the facts as they apply to this case and apply those facts to the Zoning Ordinance's definition of a handicapped case.

Article 3-11 of the Zoning Ordinance defines a handicapped case as a situation to which a person is physically, emotionally, or mentally handicapped or is affected by old age and requires constant care, yet residence by the person(s) in a dwelling constructed upon the lot is not practical or desirable under the circumstances.

The applicant is requesting permission to allow the temporary placement of a singlewide manufactured home upon the family's property to house Mrs. Anne M. Harris (wife's elderly mother).

The approval of this request will allow the temporary placement of a manufactured home to house the applicant upon the family's property. Because the use being requested is residential, it should not generate any nuisances and its impact upon surrounding properties would be minimal if not, non-existent.

Therefore, staff recommends approval with the following conditions.

STAFF RECOMMENDATION

APPROVE WITH CONDITIONS

Staff recommends approval of the Special Use Permit request subject to the following conditions:

1. A Special Use Permit is being granted to the applicant, Bill and Robin Tudor, to place a singlewide mobile home upon the family's property on a temporary basis to care for Mrs. Anne M. Harris.

2. Development of the property is undertaken and maintained to the requirements of the Greensville County Zoning Ordinance, specifically Article 3-11, the Virginia Uniform Statewide Building Code, and the Virginia Department of Health's Regulations (application to add an additional home to the property).

3. Once Mrs. Anne M. Harris is no longer able to reside upon the property, or the medical hardship no longer exists, the manufactured home shall be removed from the property within sixty (60) days and the Building and Planning Departments notified.

4. Failure to abide by the above conditions may result in the immediate revocation of the Special Use Permit.

Katherine H. Howerton TCT

Katherine H Howerton

Program Administrator

August 5, 2018

COUNTY OF

GREENSVILLE

• V I R G I N I A •

...Growing Towards New Horizons

SPECIAL USE PERMIT

FILE #: SP-8-18

Owner **Agent/Applicant** (if different from owner)

Name: Bill + Robin Tudor

Physical Address: 7490 Brink Rd (Hwy 627)
Emporia VA 23847

Mailing Address:

Telephone: 434-594-4429

Tax Map/Parcel Number(s)	Acreage(s)	Election District(s)
1. 42-2-1A	7 acres	02
2.		

General Location: Hwy 627 - Brink Rd.

Current Zoning/Proffers	Existing Use	Proposed Use
1. Residential	Residential	Residential
2.		

YOU MUST ATTACH A SURVEY PLAT OF PROPERTY WHICH INCLUDES A SCHEMATIC DRAWING OF THE PROPOSAL SHOWING BUILDING HEIGHT AND PLACEMENT, PARKING AREA(S), STORAGE AREA(S), UTILITIES, ETC.

Detail Description of Request (Address impact of proposal on check list items):

To put either a tiny home approx 400 sq ft. 12 x 34 shed or a small manufactured home on our property.

Justification: Bringing my mother (wife mother) to live on property so I can help out, health is going down but still wants some independance. This way she will have less expenses and yard and maintance work is elimanited

The foregoing information is complete and correct to the best of my knowledge. I acknowledge that representatives of Greensville County may inspect the property subject to this application and my permission to do so is hereby given.

Robin Tudor 7/25/18

Signature Date

(Agents must provide written documentation of authority)

Received by: Katherine Howard Date: 7/25/18

Planning Commission Action:

Board of Supervisors Action:

GREENSVILLE
• VIRGINIA •
...Growing Towards New Horizons

GREENSVILLE COUNTY
SPECIAL USE PERMIT
CHECK LIST

HEALTH, SAFETY, AND WELFARE:

Traffic: normal road traffic on Hwy 627

Noise: N/A

Lights: N/A

Dust: N/A

Fumes: N/A

Vibrations: N/A

Operations (Outside storage of materials, screening):

Hours of Operation:

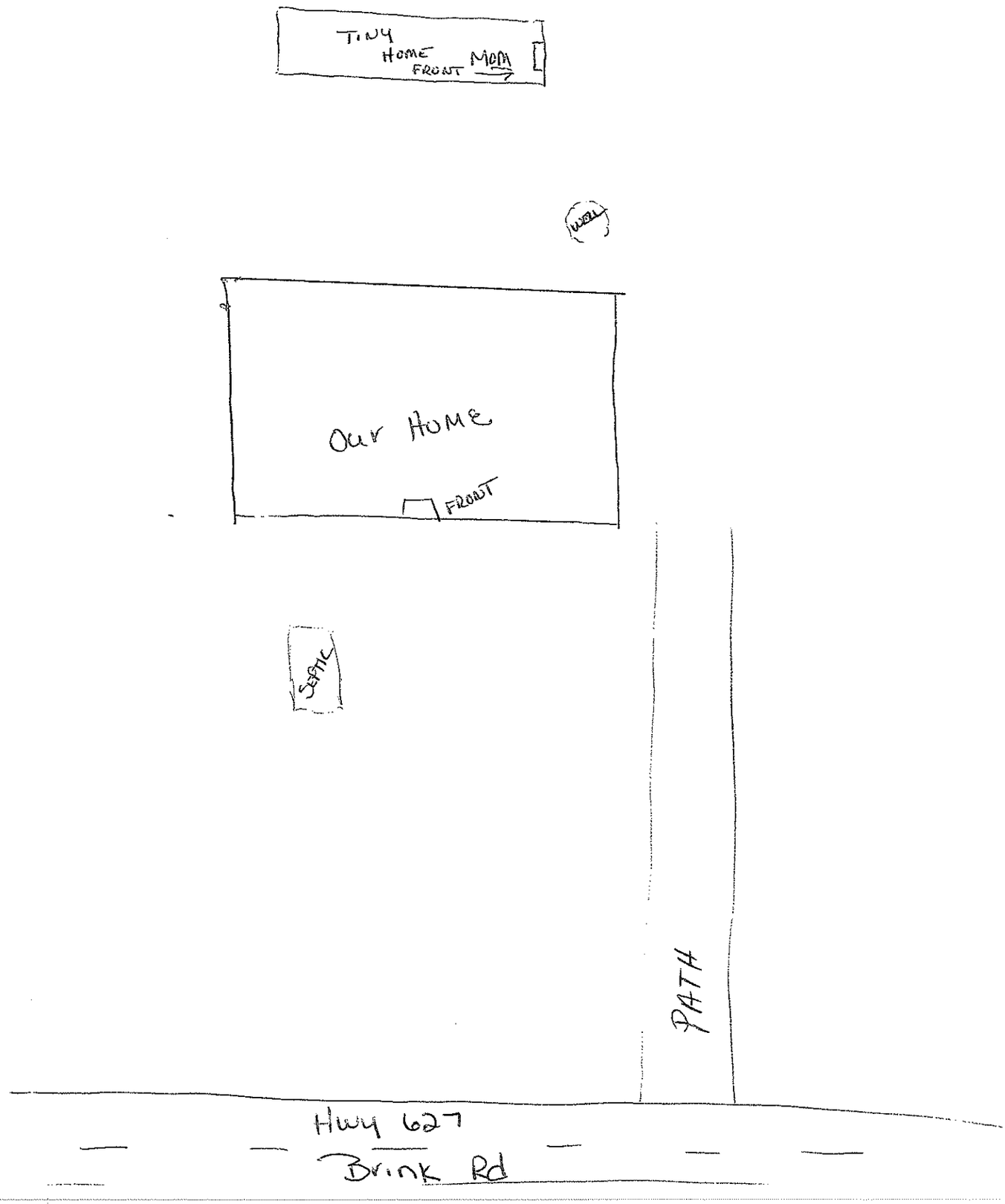
Number of Employees:

Type of Equipment:

Signage:

COMPREHENSIVE PLAN (Compatibility):

1st proposal



2nd Proposal

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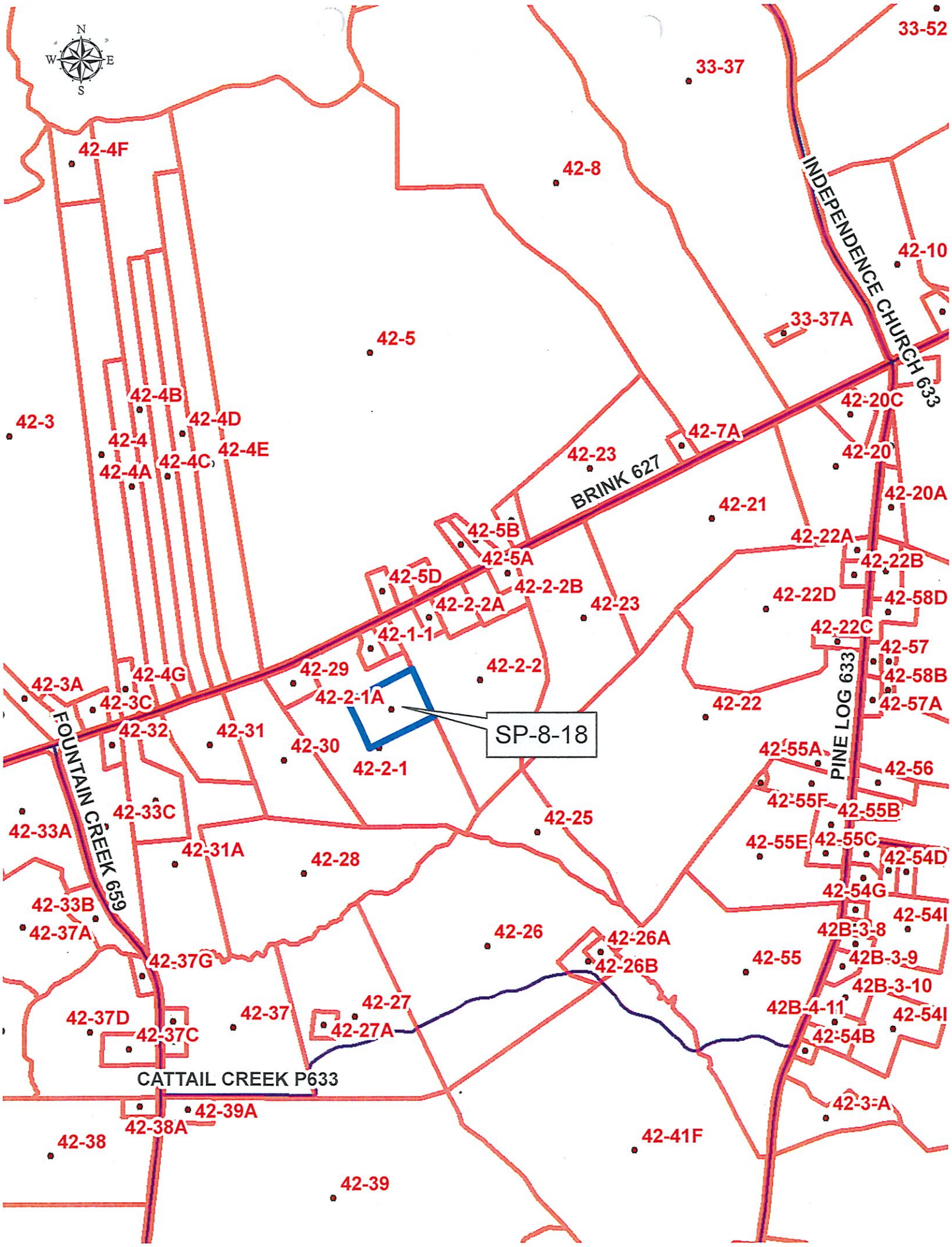
SP-8-18
7490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33-52
33-37
42-4F
42-8
INDEPENDENCE CHURCH 633
42-10
33-37A
42-5
42-4B
42-4D
42-3
42-4
42-4E
42-4A
42-4C
42-20C
42-7A
42-23
42-20
BRINK 627
42-20A
42-21
42-5B
42-22A
42-5A
42-22B
42-5D
42-2-2B
42-22D
42-58D
42-2-2A
42-23
42-1-1
42-22C
42-57
42-29
42-2-2
42-58B
42-3A
42-4G
42-2-1A
42-57A
42-3C
42-22
SP-8-18
42-32
42-31
42-30
42-2-1
42-55A
PINE LOG 633
42-56
FOUNTAIN CREEK 659
42-33C
42-55F
42-55B
42-25
42-33A
42-31A
42-55E
42-55C
42-28
42-54D
42-54G
42-33B
42-54I
42-37A
42-26
42-26A
42B-3-8
42-37G
42-26B
42-55
42B-3-9
42B-3-10
42-27
42-37
42B-4-11
42-54I
42-37D
42-27A
42-37C
42-54B
CATTAIL CREEK P633
42-39A
42-3-A
42-38A
42-38
42-41F
42-39

SP-8-18 - Bill and Robin Tudor
ADJACENT PROPERTY OWNERS

Tax Map #	Land owner
42-1-1	NEAL CARL L OR VALERIE C 3401 TIPTON LANE WOODBRIDGE VA 22192
42-1-2	THOMAS MEREDITH B OR STEPHEN ALLEN THOMAS JR 7402 BRINK RD EMPORIA VA 23847
42-2-1	TUDOR BILL GENE OR ROBIN M 7490 BRINK RD EMPORIA VA 23847
42-2-2	TUDOR RICHARD BRIAN 7096 BRINK RD EMPORIA VA 23847

Staff Report
Greensville County Solar Project Special Use Permit
SP-6-18
Greensville County, Virginia

Report Date: August 20, 2018
Planning Commission Meeting Date: August 28, 2018

APPLICATION SUMMARY

Project:	Greensville County Solar Project (Tradewind Energy Project)
Location:	Located approximately two miles southwest of Emporia, west of I-95
Parcel Record Numbers:	34-35, 34-36, 35-13, 35-14, 35-20, 35-21, 35-22, 35-24, 35-25, 35-30, 35-31
Proposal:	Applicant's request for a Special Use Permit for a 80 megawatt (MW) solar energy facility in the A-1 Zoning District
Application Submitted:	June 12, 2018
Applicant:	Greensville County Solar Project, LLC 16105 West 113th Street, Suite 105 Lenexa, Kansas 66219 Contact: Matt Gilhousen
Representative:	Justin McGeeney, Greensville County Solar Project, LLC
Owners:	See Property Owner Contact Information in Attachment A Exhibit I in the SUP Application

PLANNING COMMISSION ROLE

The Applicant has submitted a Special Use Permit (SUP) application for a solar energy facility The Planning Commission previously reviewed the applicant's proposal as a "public utility facility" under Virginia Code Section 15.2-2232(A), and determined that the general or approximate location, character, and extent of the proposed facility is substantially in accord with the County's Comprehensive Plan. The Planning Commission must now evaluate the merits of the SUP and determine if the proposed conditions sufficiently mitigate any associated impacts from the project and meet the County's conditional planned use development criteria as set forth in the Zoning Ordinance. The Planning Commission is requested to make a recommendation to the Board of Supervisors to approve or deny the SUP Application. The Planning Commission may also defer action to a future meeting.

RESIDENTIAL

3) Prevent the encroachment of conflicting land uses on existing viable neighborhoods.

COMMERCIAL/INDUSTRIAL

5) Evaluate large scale industrial economic development projects that will provide an economic benefit to the County but that may not be in designated development areas or near major transportation systems.

PUBLIC FACILITIES

3) Plan accordingly for the future needs of the population.

Planning Issues & Strategies

LOCAL PRODUCTION OF RENEWABLE ENERGY

1) There is a great interest in the construction of Solar Energy Farms throughout the County as a result for the quest to generate environmental friendly energy.

STRATEGIES/POLICIES

a. If not detrimental to the surrounding area, Solar Energy Projects greater than 20 MW_{AC} are encouraged in agricultural zoned districts.
c. It is encouraged that a Decommissioning plan be provided by the owner of such Solar Energy Projects to ensure to proper dismantling of the project.

AGRICULTURAL AND FORESTAL LANDS ISSUES

1) There is concern to maintain the agricultural characteristics of the County not included in the Urban Services District.

STRATEGIES/POLICIES

a. Re-evaluate current development standards to ensure all areas that lie within the Rural Development Area, with the exception of Major Commercial Hub, maintain these agricultural and rural development qualities.

Future Land Use Map

The Comprehensive Plan describes Rural Residential; Conservation Area as follows:

> Characterized by low-density residential development such as detached single-family units on lots larger than urban or suburban lots. Certain agricultural and farming uses are typically allowed. In addition, large scale economic development projects may be allowed subject to required land use approvals as approved by the Board of Supervisors.

Solar energy facilities may be compatible with neighboring agricultural and rural uses if they are not located in proximity to, or within sight of, scenic routes or historic or recreational resources, and if they are appropriately screened from public rights-of-way and adjacent properties.

(c) **If a use is not specifically enumerated in the zoning ordinance by-right, special exception, or special use in any district, then the planning commission may recommend and the board of supervisors may authorize such use. Nothing contained in this section shall be construed to permit the approval of any use specifically prohibited.**

Not applicable. The Zoning Ordinance permits a Solar Energy Project greater than 20 MW_{AC} as a Special Use through a Conditional Use Planned Development approval in Agricultural zoned districts.

Staff agrees.

Section 4-4 of the Zoning Ordinance outlines the general conditions that apply to all special uses as listed below with Applicant responses following each (staff's comments are in *italics*).

(a) **The use shall be designed or arranged on the land in such a way as to cause no more adverse impact on the adjacent property, and/or the neighborhood than might be caused by the least restrictive use otherwise permitted by right in the district.**

The Project will adhere to setbacks and yard requirements at the Project boundary adjacent to non-participating property owners as any use in the A-1 Zoning District: Project solar panels will be setback a minimum of 100 feet from the centerline of adjacent roadways. In addition, Project solar panels will be setback a minimum of 50 feet from adjacent non-participating property lines. In most cases, Project solar panel setbacks will be in excess of 100 feet; and in some cases, setbacks will exceed 1,500 feet.

The Project site is currently buffered by forested areas and Interstate 95, however additional vegetative screening will be provided as needed along road right-of-ways. In order to preserve the buffer created by existing forested areas, TWE is working with Project landowners on a Timber Preservation Agreement in which the landowners commit to preserve (not harvest) a generally 50 foot wide area of timber along their property line.

Adequate project setbacks, buffers and screening are critical to ensuring this criterion is met.

(b) **The use shall comply with all licensing requirements, if any, of any County, State or Federal government or agency.**

The Project Company will comply with all governmental licensing requirements applicable to the Project at the County, state and federal level.

The proposed conditions ensure compliance with all County, state and federal governmental licensing requirements applicable to the Project.

(c) **The use shall not be operated as to cause a nuisance to the neighborhood in which it is located.**

away from any neighboring properties. Security lighting would be located near the secure entrance to the Project site.

Dust: The Project would not result in adverse impacts to air quality. Some particulate emissions from dust generation would result from the operation of heavy equipment during construction. However, these emissions would be temporary and limited to active areas of construction. Best Management Practices (BMPs) would be implemented during construction to mitigate dust emissions. Specifically, water trucks would be utilized to spray disturbed areas to minimize dust emissions.

Fumes: Large earth-moving equipment, skid loaders, trucks, and other mobile sources may be powered by diesel or gasoline and are sources of combustion emissions. Seasonal winds have the potential to move emissions outside of the Project area; however, emissions would be minimal and transient in nature during the period of construction (six to nine months) and would not significantly contribute to the ozone levels in Greensville County.

Vibrations: Vibration levels will not increase as a result of the proposed Project.

Operations (Outside storage of materials, screening): Project operations will not require outdoor storage of any materials. Therefore, this consideration does not apply. The Project site is buffered by natural screening of forested areas and Interstate-95, however, additional vegetative screening will be added as necessary along certain road right-of-ways as provided herein.

Hours of Operation: The proposed Project will operate during daylight hours only.

Number of Employees: The proposed Project will create approximately 300 temporary jobs during construction; and one (1) to four (4) permanent jobs during operations based on total employee hours spent at the facility. Once operational, the Project will be an unmanned facility.

Type of Equipment: In general, Project equipment and infrastructure will include a ground-mounted solar array that will utilize PV solar modules and single-axis tracking technology, inverter stations, substation, perimeter security fencing and the necessary interconnection facilities as specified by the local utility to connect the Project to the electrical grid.

Signage: Project signage will be limited to warning signs and will be in compliance with the County's Zoning Ordinance.

The Planning Commission must determine if the proposed conditions will ensure that the Applicant/Owner will adequately address these project details so that the Solar Facility will not constitute a detriment to the community during the proposed duration (>20 years) of the project.

2. Project is in Conformity with Comprehensive Plan and Policies

Greensville County Solar Project, LLC submitted a 15.2 2232 Review application for the proposed Project on April 10, 2018. The 15.2 2232 Review application included a review of the County's Comprehensive Plan and determined the proposed Project is consistent with and supportive of the Application's stated goals of the County's Comprehensive Plan.

Conditions

If the Planning Commission determines that the application furthers the Comprehensive Plan's goals and objectives and that it meets the criteria set forth in the Zoning Ordinance, then staff recommends the following conditions to mitigate the adverse effects of this utility-scale solar generation facility with any recommendation for approval.

1. The Applicant will develop the Solar Facility in substantial accord with the Conceptual Site Plan dated May 3, 2018 included with the application as determined by the Zoning Administrator (ZA). Significant deviations or additions, including any enclosed building structures to the Preliminary Site Plan will require review and approval by the Planning Commission and Board of Supervisors.
2. Site Plan Requirements. In addition to all Virginia site plan requirements and site plan requirements of the Zoning Administrator, the Applicant shall provide the following plans for review and approval for the Solar Facility prior to the issuance of a building permit:
    a. *Construction Management Plan.* The Applicant shall prepare a "Construction Management Plan" for each applicable site plan for the Solar Facility, and each plan shall address the following:
        i. Traffic control methods (in coordination with the Virginia Department of Transportation [VDOT] prior to initiation of construction): i. Lane closures, ii. Signage, and iii. Flagging procedures.
        ii. Site access planning. Directing employee and delivery traffic to minimize conflicts with local traffic.
        iii. Fencing. The Applicant shall install temporary security fencing prior to the commencement of construction activities occurring on the Solar Facility project.
        iv. Lighting. During construction of the Solar Facility, any temporary construction lighting shall be positioned downward, inward, and shielded to eliminate glare from all adjacent properties. Emergency and/or safety lighting shall be exempt from this construction lighting condition.
    b. *Construction Mitigation Plan.* The Applicant shall prepare a "Construction Mitigation Plan" for each applicable site plan for the Solar Facility to the satisfaction of the Zoning Administrator. Each plan shall address, at a minimum, the effective mitigation of dust, any burning operations, hours of construction activity, access and road improvements, and handling of general construction complaints.
    c. *Grading plan.* The Project shall be constructed in compliance with the County approved grading plan as determined and approved by the Zoning Administrator or his designee prior to the commencement of any construction activities and a bond or other security will be posted for the grading operations The grading plan shall:
        i. clearly show existing and proposed contours;
        ii. note the locations and amount of topsoil to be removed (if any) and the percent of the site to be graded;

d. *Ingress/Egress.* Permanent access roads and parking areas will be stabilized with gravel, asphalt or concrete to minimize dust and impacts to adjacent properties.

4. Buffers.

   i. *Setbacks.* A minimum one-hundred fifty (150) foot setback, which includes a 50-foot planted buffer as described below, shall be maintained from the street line (edge of right of way) where the Property abuts any public right-of-ways.

   ii. A minimum one-hundred fifty (150) foot setback, which includes a 50-foot planted buffer as described below, from any adjoining property line that is improved with a single family residence.

   b. *Screening.* A minimum fifty (50) foot vegetative buffer (consisting of existing trees and vegetation) shall be maintained. If there is no existing vegetation or if the existing vegetation is inadequate to serve as a buffer as determined by the Zoning Administrator, a triple row of trees/shrubs will be planted on approximately 10-foot centers in the 25 feet immediately adjacent to the security fence. New plantings of trees and shrubs shall be approximately 6 foot in height at time of planting. In addition, pine seedlings will be installed in the remaining 25 feet of the 50-foot buffer. Ancillary project facilities may be included in the buffer as described in the application where such facilities do not interfere with the effectiveness of the buffer as determined by the Zoning Administrator.

   c. *Wildlife corridors.* The Applicant shall identify an access corridor for wildlife to navigate through the Solar Facility. The proposed wildlife corridor shall be shown on the site plan submitted to the County. Areas between fencing shall be kept open to allow for the movement of migratory animals and other wildlife.

5. Height of Structures. Solar facility structures shall not exceed 10', however, towers constructed for electrical lines may exceed the maximum permitted height as provided in the A1 zoning district regulations (§16-2), provided that no structure shall exceed the height of 25 feet above ground level.

6. Inspections. The Applicant will allow designated County representatives or employees access to the facility at any time for inspection or other County-related business purposes.

7. Training. The Applicant shall arrange a training session with the Greensville Fire Department to familiarize personnel with issues unique to a solar facility before operations begin.

8. Compliance. The Solar Facility shall be designed, constructed, and tested to meet relevant local, state, and federal standards as applicable.

9. Decommissioning.

   a. *Decommissioning Plan.* No decommissioning plan has been provided at this time. The Applicant shall submit a decommissioning plan to the County for approval prior to the issuance of any permits. The purpose of the decommissioning plan is to specify the procedure by which the Applicant or its successor would remove the Solar Facility after the end of its useful life and to restore the property for agricultural uses.

Facility, the property owners shall commence decommissioning activities in accordance with the decommissioning plan. Following the completion of decommissioning of the entire Solar Facility arising out of a default by the Applicant or its successor, any remaining security funds held by the County shall be distributed to the property owners in a proportion of the security funds and the property owner's acreage ownership of the Solar Facility.

e. *Applicant/Property Owner Default; Decommissioning by the County.*

   i. If the Applicant, its successor, or the property owners fail to timely decommission the Solar Facility, the County shall have the right, but not the obligation, to commence decommissioning activities and shall have access to the property, access to the full amount of the decommissioning security, and the rights to the Solar Facility equipment and materials on the property.

   ii. If applicable, any excess decommissioning security funds shall be returned to the current owner of the property after the County has completed the decommissioning activities.

   iii. Prior to the issuance of any permits, the Applicant and the property owners shall deliver a legal instrument to the County granting the County (1) the right to access the property, and (2) an interest in the Solar Facility equipment and materials to complete the decommissioning upon the Applicant's and property owner's default. Such instrument(s) shall bind the Applicant and property owners and their successors, heirs, and assigns. Nothing herein shall limit other rights or remedies that may be available to the County to enforce the obligations of the Applicant, including under the County's zoning powers.

f. *Equipment/building removal.* All physical improvements, materials, and equipment related to solar energy generation, both surface and subsurface components, shall be removed in their entirety. The soil grade will also be restored following disturbance caused in the removal process. Perimeter fencing will be removed and recycled or re-used. Where the current or future landowner prefers to retain the fencing, these portions of fence would be left in place.

g. *Infrastructure removal.* All access roads will be removed, including any geotextile material beneath the roads and granular material. The exception to removal of the access roads and associated culverts or their related material would be upon written request from the current or future landowner to leave all or a portion of these facilities in place for use by that landowner. Access roads will be removed within areas that were previously used for agricultural purposes and topsoil will be redistributed to provide substantially similar growing media as was present within the areas prior to site disturbance.

h. *Partial Decommissioning.* If decommissioning is triggered for a portion, but not the entire Solar Facility, then the Applicant or its successor will commence and complete decommissioning, in accordance with the decommissioning plan, for the applicable portion of the Solar Facility; the remaining portion of the Solar Facility would continue to be subject to the decommissioning plan. Any reference to decommissioning the Solar Facility shall include the obligation to decommission

PLANNING COMMISSION ACTION

The Planning Commission has three options:

a. Recommend approval of the application with written reasons for its decision.
b. Recommend denial of the application with written reasons for its decision.
c. Defer the application for further discussion and consideration.

Draft Planning Commission Actions

Option 1 – Recommend approval of the application with the stated (or amended) conditions

I move that the Greensville County Solar Project, LLC's proposed 80-megawatt photovoltaic solar energy facility as described in SP-6-18, sufficiently mitigates adverse impacts associated with the project if approved with the conditions as outlined herein and recommended by the Planning Commission.

Option 2 – Recommend denial of the application

I move that the Greensville County Solar Project, LLC's proposed 80-megawatt photovoltaic solar energy facility as described in SP-6-18, does not sufficiently mitigate the adverse impacts associated with the project and should therefore be denied. Among other concerns, the Planning Commission finds that,

1. The proposed solar energy facility does not preserve the rural character of the County.
2. The use is of such a nature or located so as to exercise a detrimental influence on the surrounding neighborhood.
3. The proposed solar energy facility does not incorporate sufficient buffers to address the impacts on adjacent areas.
4. The application property is designated in the future land use plan as Rural Residential and is planned for agricultural and farming uses and the 1,099 acre solar energy facility is inconsistent with this designation.
5. The Comprehensive Plan indicates that solar energy facilities may be acceptable if not detrimental to surrounding areas and the proposed facility encroaches on existing residential and agricultural uses.
6. Concern regarding the decommissioning of the proposed solar energy facility, such as, financial assurance that the facility will be properly removed and restoration of the application property to its agricultural uses.

Option 3 – Deferral of the application

I move that the Planning Commission defer a decision on Greensville County Solar Project, LLC's request regarding its proposed 80-megawatt photovoltaic solar energy facility SP-6-18, until the Planning Commission meeting scheduled to begin at _____ p.m. on _____, in the Board of Supervisors meeting room.

Staff Report
Meherrin Solar Project Special Use Permit
SP-5-18
Greensville County, Virginia

Report Date: August 8, 2018
Planning Commission Meeting Date: August 14, 2018

APPLICATION SUMMARY

Project:	Meherrin Solar Project
Location:	Located between Fountain Creek Road and Pine Log Road (Rt. 633) and south of the intersection with Brink Road (Rt. 627) and Rt. 633. Another section is located east of Pine Log Road and south of the Brink substation.
Parcel Record Numbers:	42-22, 42-25, 42-26, 42-27, 42-27A, 42-37, 42-37B, 42-37F, 42-39, 42-41, 42-41F, 42-50, 42-51, 42-55, 42B-4-12
Proposal:	Applicant's request for a Special Use Permit for a 60 megawatt (MW) solar energy facility in the A-1 Zoning District
Application Submitted:	Original application filing May 18, 2018; revised filing on July 6, 2018
Applicant:	Meherrin Solar, LLC 41 Victoria Street Gatineau, QC J8X2A1 Contact: Rachel Vanasse
Representative:	Francis Hodsoll, SolUnesco 1818 Library Street, Suite 500 Reston, Virginia 20190
Owners:	See attached Table 12-1: Subject Property Parcel Owners and Addresses

PLANNING COMMISSION ROLE

The Applicant has submitted a Special Use Permit (SUP) application for a solar energy facility. The Planning Commission previously reviewed the applicant's proposal as a "public utility facility" under Virginia Code Section 15.2-2232(A), and determined that the general or approximate location, character, and extent of the proposed facility is substantially in accord with the County's Comprehensive Plan. The Planning Commission must now evaluate the merits of the SUP and determine if the proposed conditions sufficiently mitigate any associated impacts from the project and meet the County's conditional planned use development criteria as set forth in the Zoning Ordinance. The Planning Commission is requested to make a recommendation to the Board of

Supervisors to approve or deny the SUP Application. The Planning Commission may also defer action to a future meeting.

PROPOSED DEVELOPMENT

The Applicant proposes to construct a 60 megawatt (alternating current) photovoltaic solar energy generation facility on 15 parcels consisting of a total of approximately 846 acres. The solar energy generation facility will be connected to the Dominion Power power grid at the Brink substation which is located to the east off Pine Log Road. The project proposes 478 acres of solar panels. The design employs predominantly single-axis tracking technology, meaning it will use solar panels mounted on a framework that tracks the movement of the sun during the day. Visually, the project will appear as long rows of solar panels mounted on posts and horizontal supports. All solar panels will be less than 10 feet high. Other project development details are set forth in the SUP application along with the site plan (p. 10-12 of the attached application).

EXISTING CONDITIONS AND ZONING

The application property consists of a mixture of cleared land, crop land, and existing timber land with the land historically used for agricultural and forestry purposes. The application property is currently zoned A-1, agricultural zoning district.

ADJACENT AND SURROUNDING USES

The application property is bordered by existing agricultural land consisting of a mixture of cleared land and existing timber land, as well as a number of single-family residential properties. The application property is located in an agriculturally zoned area (A-1) and is not proximate to any scenic byways, or historic resources. Some industrial uses are located nearby including the Brink substation and land that has been mined for minerals.

COMPREHENSIVE PLAN CITATIONS

Below are the relevant excerpts of Greensville County's Comprehensive Plan.

Goals and Objectives

GENERAL

1) Provide adequate governmental services, including public utilities, to meet the needs of Greensville's citizens.
2) Coordinate development with the provision for public utilities and services.
3) Preserve the rural character of the County by directing and controlling growth in designated areas.

LAND USE GENERAL

1) Encourage new development that complements surrounding uses.

2) Concentrate development in appropriate locations by encouraging more efficient site design and incorporating proper buffers between differing uses.

RESIDENTIAL

3) Prevent the encroachment of conflicting land uses on existing viable neighborhoods.

COMMERCIAL/INDUSTRIAL

5) Evaluate large scale industrial economic development projects that will provide an economic benefit to the County but that may not be in designated development areas or near major transportation systems.

PUBLIC FACILITIES

3) Plan accordingly for the future needs of the population.

Planning Issues & Strategies

LOCAL PRODUCTION OF RENEWABLE ENERGY

1) There is a great interest in the construction of Solar Energy Farms throughout the County as a result for the quest to generate environmental friendly energy.

STRATEGIES/POLICIES

a. If not detrimental to the surrounding area, Solar Energy Projects greater than 20 MW_{AC} are encouraged in agricultural zoned districts.
c. It is encouraged that a Decommissioning plan be provided by the owner of such Solar Energy Projects to ensure to proper dismantling of the project.

AGRICULTURAL AND FORESTAL LANDS ISSUES

1) There is concern to maintain the agricultural characteristics of the County not included in the Urban Services District.

STRATEGIES/POLICIES

a. Re-evaluate current development standards to ensure all areas that lie within the Rural Development Area, with the exception of Major Commercial Hub, maintain these agricultural and rural development qualities.

Future Land Use Map

The Comprehensive Plan describes Rural Residential; Conservation Area as follows:

> Characterized by low-density residential development such as detached single-family units on lots larger than urban or suburban lots. Certain agricultural and farming uses are typically allowed. In addition, large scale economic development projects may be

allowed subject to required land use approvals as approved by the Board of Supervisors.

ZONING ORDINANCE PROVISIONS

In November 2016, the County Board of Supervisors amended the Zoning Ordinance (Articles 4 and 23) to permit solar energy facilities (projects) by special use permit (Conditional Planned Use Development) in the A-1, B-1, B-2, and M-1 zoning districts. As set forth in the Zoning Ordinance:

A conditional planned use development provides for the planning commission to recommend, and the board of supervisors to authorize, specific uses not permitted within a specific zoning district, provided that the board of supervisors considers the following in making their determination:

(a) That the uses permitted by such exception are necessary or desirable and are appropriate with respect to the primary purpose of the development.

(b) That the uses permitted by such exception are not of such a nature or located so as to exercise a detrimental influence on the surrounding neighborhood.

(c) If a use is not specifically enumerated in the zoning ordinance by-right, special exception, or special use in any district, then the planning commission may recommend and the board of supervisors may authorize such use. Nothing contained in this section shall be construed to permit the approval of any use specifically prohibited.

STAFF ANALYSIS

In the revised application materials dated July 6, 2018 (Attachment A), numerous conditions are suggested including, but not limited to, addressing allowable uses, construction management and mitigation, operations, and general conditions including decommissioning, site restoration, screening, and plan reviews and associated costs.

A number of project benefits to the County are also asserted including revenue to landowners, economic benefits of the construction process, increased County revenue, low impact on County services, the conservation of land, educational opportunities, and the benefits of clean energy. The application may be reviewed in full (Attachment A) for further details.

The Conditional Use Planned Development considerations cited above are addressed more thoroughly below.

(a) That the uses permitted by such exception are necessary or desirable and are appropriate with respect to the primary purpose of the development.

Local production of renewable energy is identified in the Greensville Comprehensive Plan as a planning issue with a policy to encourage Solar Energy Projects greater than 20 MW_{AC} in agricultural zoned districts, if not detrimental to the surrounding area. The Planning Commission must determine if the Solar Facility (the primary purpose of the development) is appropriate in the proposed location.

(b) That the uses permitted by such exception are not of such a nature or located so as to exercise a detrimental influence on the surrounding neighborhood.

Solar energy facilities may be compatible with neighboring agricultural and rural uses if they are not located in proximity to, or within sight of, scenic routes or historic or recreational resources, and if they are appropriately screened from public rights-of-way and adjacent properties. Meeting and exceeding zoning district setbacks at the project boundary and natural and additional screening will help to ensure that the surrounding area is buffered from the Project.

(c) **If a use is not specifically enumerated in the zoning ordinance by-right, special exception, or special use in any district, then the planning commission may recommend and the board of supervisors may authorize such use. Nothing contained in this section shall be construed to permit the approval of any use specifically prohibited.**

Not applicable. The Zoning Ordinance permits a Solar Energy Project greater than 20 MW_{AC} as a Special Use through a Conditional Use Planned Development approval in Agricultural zoned districts.

Section 4-4 of the Zoning Ordinance outlines the general conditions that apply to all special uses as listed below.

(a) **The use shall be designed or arranged on the land in such a way as to cause no more adverse impact on the adjacent property, and/or the neighborhood than might be caused by the lease restrictive use otherwise permitted by right in the district.**

Adequate project setbacks, buffers and screening are critical to ensuring this criterion is met.

(b) **The use shall comply with all licensing requirements, if any, of any County, State or Federal government or agency.**

The proposed conditions ensure compliance with all County, state and federal governmental licensing requirements applicable to the Project.

(c) **The use shall not be operated as to cause a nuisance to the neighborhood in which it is located.**

Adequate project setbacks, buffers and screening are critical to ensuring this criteria is met.

(d) **In granting a special use, the Board of Supervisors shall consider the public convenience, necessity and general welfare and its action shall also be consistent with good zoning practices.**

The Planning Commission must determine if the Solar Facility will maintain the public welfare and be consistent with upholding good zoning practices if it meets or exceeds the requirements of the Zoning Ordinance applicable to Solar Projects in the A-1 Zoning District.

Zoning Ordinance, Article 16, states that a special use permit (SUP) shall not be issued unless the Board of Supervisors finds that the proposed use (1) would not be detrimental to the community and (2) is in conformity with the Comprehensive Plan and Policies.

1. **Project Would Not Be Detrimental to the Community**

As required by the Greensville County SUP application, the following considerations should be adequately addressed for the proposed Project: traffic, noise, lighting, dust, fumes, vibrations, operational details, hours of operation, number of employees, type of equipment, and signage.

All of the above considerations are addressed in some manner in the Application (Attachment A). The Planning Commission must determine if the proposed conditions will ensure that the Applicant/Owner will adequately address these project details so that the Solar Facility will not constitute a detriment to the community during the proposed duration (>20 years) of the Project.

2. **Project is in Conformity with Comprehensive Plan and Policies**

Meherrin Solar, LLC submitted a 15.2-2232 Review application for the proposed Project on April 10, 2018. The 15.2-2232 staff report included a review of the County's Comprehensive Plan goals and objectives, and the Planning Commission determined the proposed Project is substantially in accord with the County's Comprehensive Plan.

Project Benefits

A number of project benefits to the County are also asserted including job creation at the state and local level, revenue to the County and the State, economic benefits of the construction process, and increased property taxes. The application may be reviewed in full (Attachment A) for further details.

Primary Issues

As part of the 2232 review process, staff identified three main issues that should be addressed in the SUP – buffers/screening, a grading plan, and a decommissioning plan with a cash escrow security. Another concern has been expressed by the community regarding property values.

Buffers – The SUP proposes a minimum 50' vegetative buffer where the project would be otherwise visible from public rights-of-way or adjacent properties. As stated in the application, "The primary visual screen will be provided by a triple row of evergreen trees/shrubs capable of achieving a mature height of at least 10 feet, which will be planted in the 25 feet immediately adjacent to the security fence… The remainder of the proposed 50-foot vegetative buffer will be planted with pine seedlings which will grow quickly and provide screening while the primary buffer matures and beyond."

This is a 25' increase from what was proposed in the 2232 process although the proposal for the planting of pine seedlings in the additional 25' may not provide an effective additional screen for several years.

Grading Plan – County staff requested that a grading plan be submitted as part of the SUP request so that it can be properly evaluated as to site impacts which the application indicates will be minimal. The applicant states that, "The current status of the Meherrin Solar project

does not allow us to provide a meaningful grading plan for Greensville County to evaluate at this time. Environmental constraints such as wetlands have not been determined for the entire project site and fully reliable topography has yet to be obtained.... Once the project moves forward, the applicant will provide the county with Construction Plans which will include a grading plan, storm water control plan, and erosion and sediment control plan for review and approval prior to obtaining a building permit and initiating construction. The Applicant will also provide a one-time sum of $10,000.00 to be used at the county's discretion in obtaining an independent third-party review of the construction plans or any part thereof."

All plans should be reviewed by a third party (County on-call engineer) prior to submission for review by the Virginia Department of Environmental Quality (VDEQ). Securities (cash escrow, letter of credit, insurance bond) should be posted for this work (grading, ESC, SWP) prior to any issuance of a land disturbance permit.

Decommissioning Plan – At this time, a decommissioning cost estimate has not been generated. County staff has made it clear that a cash escrow security for decommissioning is strongly preferred over any other form of security. The applicant states that, "If granted the Special Use Permit, Meherrin Solar, LLC will, prior to construction, provide an independent engineer's estimate for the total cost of decommissioning. The applicant also agrees to review the decommissioning plan and update the cost estimate on every fifth anniversary of the Commercial Online date of the project. Furthermore, Meherrin Solar, LLC will reimburse the county up to $5,000.00 of the cost to obtain a third-party review of the initial decommissioning cost estimate. Subsequently, the applicant will reimburse the county up to $5,000.00 to cover the cost of third party review of updated decommissioning cost estimates every five years... Prior to construction the company shall post or arrange for the posting of Letter of Credit in an amount sufficient to ensure decommissioning of the solar facility and removal of the improvements from the Property consistent with standard industry practices." The Decommissioning Plan should be closely examined to ensure that the interests of the property owners, adjacent owners, and the County are adequately protected by a Plan that ensures removal of the solar facilities after use thereof is terminated with restoration of the underlying land to its former condition, along with fiscal assurances deemed adequate by the County to ensure successful implementation of the Decommissioning Plan. Staff continues to recommend a cash escrow security and any security, regardless of its form, should be received prior to final inspections (approval to operate).

Property Values – Pearson's Appraisal Service, Inc., a local tax assessment firm, has been asked by the County to address a common concern expressed by adjacent and nearby property owners regarding the impact of a utility-scale solar facility on their property values. That opinion is expressed in Attachment B.

Conditions

If the Planning Commission determines that the application furthers the Comprehensive Plan's goals and objectives and that it meets the criteria set forth in the Zoning Ordinance, then staff recommends the following conditions to mitigate the adverse effects of this utility-scale solar generation facility with any recommendation for approval.

1. The Applicant will develop the Solar Facility in substantial accord with the Preliminary Site Plan dated 7/6/18 included with the application as determined by the Zoning Administrator (ZA). Significant deviations or additions, including any enclosed building structures to the Preliminary Site Plan will require review and approval by the Planning Commission and Board of Supervisors.
2. Site Plan Requirements. In addition to all Virginia site plan requirements and site plan requirements of the Zoning Administrator, the Applicant shall provide the following plans for review and approval for the Solar Facility prior to the issuance of a building permit:
    a. *Construction Management Plan.* The Applicant shall prepare a "Construction Management Plan" for each applicable site plan for the Solar Facility, and each plan shall address the following:
        i. Traffic control methods (in coordination with the Virginia Department of Transportation [VDOT] prior to initiation of construction): i. Lane closures, ii. Signage, and iii. Flagging procedures.
        ii. Site access planning. Directing employee and delivery traffic to minimize conflicts with local traffic.
        iii. Fencing. The Applicant shall install temporary security fencing prior to the commencement of construction activities occurring on the Solar Facility project.
        iv. Lighting. During construction of the Solar Facility, any temporary construction lighting shall be positioned downward, inward, and shielded to eliminate glare from all adjacent properties. Emergency and/or safety lighting shall be exempt from this construction lighting condition.
    b. *Construction Mitigation Plan.* The Applicant shall prepare a "Construction Mitigation Plan" for each applicable site plan for the Solar Facility, and each plan shall address the effective mitigation of dust, burning operations, hours of construction activity, access and road improvements, and handling of general construction complaints as set forth and described in the application materials and to the satisfaction of the Zoning Administrator.
    c. *Grading plan.* The Project shall be constructed in compliance with the County approved grading plan as determined and approved by the Zoning Administrator or his designee prior to the commencement of any construction activities and a bond or other security will be posted for the grading operations The grading plan shall:
        i. clearly show existing and proposed contours;

ii. note the locations and amount of topsoil to be removed (if any) and the percent of the site to be graded;

iii. Limit grading to the greatest extent practicable by avoiding steep slopes and laying out arrays parallel to landforms;

iv. An earthwork balance will be achieved on-site with no import or export of soil;

v. In areas proposed to be permanent access roads which will receive gravel or in any areas where more than a few inches of cut are required, topsoil will first be stripped and stockpiled on-site to be used to increase the fertility of areas intended to be seeded;

vi. Take advantage of natural flow patterns in drainage design and keep the amount of impervious surface as low as possible to reduce storm water storage needs.

d. *Erosion and Sediment Control Plan.* The County will have a third-party review with corrections completed prior to submittal for DEQ review and approval. The owner or operator shall construct, maintain and operate the project in compliance with the approved plan. An E&S bond (or other security) will be posted for the construction portion of the project.

e. *Stormwater Management Plan.* The County will have a third-party review with corrections completed prior to submittal for DEQ review and approval. The owner or operator shall construct, maintain and operate the project in compliance with the approved plan. A storm water control bond (or other security) will be posted for the project for both construction and post construction as applicable and determined by the Zoning Administrator.

f. *Project Screening and Vegetation Plan.* The owner or operator shall construct, maintain and operate the facility in compliance with the approved plan. A separate security shall be posted for the ongoing maintenance of the project's vegetative buffers in an amount deemed sufficient by the Zoning Administrator.

g. The Applicant will provide to the County a one-time sum of $10,000.00 to be paid at the time of the first site plan submission to be used at the County's discretion in obtaining an independent third-party review of any site plans or construction plans or part thereof.

h. The design, installation, maintenance and repair of the Solar Facility in accordance with the most current National Electrical Code (NFPA 70) available (2014 version or later as applicable).

3. Operations.

a. *Permanent Security Fence.* The Applicant shall install a permanent security fence, consisting of chain link, two-inch square mesh, six (6) feet in height, surmounted by three strands of barbed wire, around the Solar Facility project prior to the commencement of operations of the Solar Facility. Failure to maintain the fence in a good and functional condition will result in revocation of the permit.

b. *Lighting.* Any on-site lighting provided for the operational phase of the Solar Facility shall be dark-sky compliant, shielded away from adjacent properties, and positioned downward to minimize light spillage onto adjacent properties.

c. *Noise.* Daytime noise will be under 67dBA during the day with no noise emissions at night.

d. *Ingress/Egress.* Permanent access roads and parking areas will be stabilized with gravel, asphalt or concrete to minimize dust and impacts to adjacent properties.

4. Buffers.

   a. *Setbacks.*

      i. A minimum one-hundred fifty (150) foot setback, which includes a 50-foot planted buffer as described below, shall be maintained from the street line (edge of right of way) where the Property abuts any public right-of-ways.

      ii. A minimum one-hundred fifty (150) foot setback, which includes a 50-foot planted buffer as described below, from any adjoining property line that is improved with a single family residence.

   b. *Screening.* A minimum fifty (50) foot vegetative buffer (consisting of existing trees and vegetation) shall be maintained. If there is no existing vegetation or if the existing vegetation is inadequate to serve as a buffer as determined by the Zoning Administrator, a triple row of trees/shrubs will be planted on approximately 10-foot centers in the 25 feet immediately adjacent to the security fence. New plantings of trees and shrubs shall be approximately 6 foot in height at time of planting. In addition, pine seedlings will be installed in the remaining 25 feet of the 50-foot buffer. Ancillary project facilities may be included in the buffer as described in the application where such facilities do not interfere with the effectiveness of the buffer as determined by the Zoning Administrator.

   c. *Wildlife corridors.* The Applicant shall identify an access corridor for wildlife to navigate through the Solar Facility. The proposed wildlife corridor shall be shown on the site plan submitted to the County. Areas between fencing shall be kept open to allow for the movement of migratory animals and other wildlife.

5. Height of Structures. Solar facility structures shall not exceed 10', however, towers constructed for electrical lines may exceed the maximum permitted height as provided in the A1 zoning district regulations (§16-2), provided that no structure shall exceed the height of 25 feet above ground level.

6. Inspections. The Applicant will allow designated County representatives or employees access to the facility at any time for inspection purposes as set forth in their application.

7. Training. The Applicant shall arrange a training session with the Greensville Fire Department to familiarize personnel with issues unique to a solar facility before operations begin.

8. Compliance. The Solar Facility shall be designed, constructed, and tested to meet

relevant local, state, and federal standards as applicable.

9. Decommissioning.
    a. *Decommissioning Plan.* No decommissioning plan has been provided at this time. The Applicant shall submit a decommissioning plan to the County for approval prior to the issuance of any permits. The purpose of the decommissioning plan is to specify the procedure by which the Applicant or its successor would remove the Solar Facility after the end of its useful life and to restore the property for agricultural uses.
    b. *Decommissioning Cost Estimate.* No decommissioning cost estimate has been provided at this time. The decommissioning plan shall include a decommissioning cost estimate prepared by a Virginia licensed professional engineer.
        i. The cost estimate shall provide the gross estimated cost to decommission the Solar Facility in accordance with the decommissioning plan and these conditions. The decommissioning cost estimate shall not include any estimates or offsets for the resale or salvage values of the Solar Facility equipment and materials.
        ii. The Applicant, or its successor, shall reimburse the County up to $5,000 for an independent review and analysis by a licensed engineer of the initial decommissioning cost estimate.
        iii. The Applicant, or its successor, will update the decommissioning cost estimate every five (5) years and reimburse the County for up to $5,000 for the County's independent review and analysis by a licensed engineer of each decommissioning cost estimate revision.
    c. *Security.*
        i. Prior to the approval of the decommissioning plan, the Applicant shall provide an amount equal to the decommissioning cost estimate as security for the decommissioning of the Solar Facility.
        ii. The security shall be in the form of cash to be held by an escrow agent at a financial institution acceptable to the County pursuant to a mutually acceptable escrow agreement. Upon written request, the Board of Supervisors may accept other forms of security, provided that such form of security adequately protects the interests of the County and the public upon a default of the Applicant's obligations to decommission the Solar Facility.
        iii. Upon the receipt of the first revised decommissioning cost estimate (following the 5th anniversary), any increase or decrease in the decommissioning security shall be funded by the Applicant, or refunded to Applicant (if permissible by the form of security), within ninety (90) days and will be similarly trued up for every subsequent five year updated decommissioning cost estimate.

iv. The security must be received prior to the final building inspection and issuance of any final permit to operate the Solar Facility and must stay in force for the duration of the life span of the Solar Facility and until all decommissioning is completed. If the County receives notice or reasonably believes that any form of security has been revoked or the County receives notice that any security may be revoked, the County may revoke the special use permit and shall be entitled to take all action to obtain the rights to the form of security.

d. *Applicant/Property Owner Obligation.* Within six (6) months after the cessation of use of the Solar Facility for electrical power generation or transmission, the Applicant or its successor, at its sole cost and expense, shall decommission the Solar Facility in accordance with the decommissioning plan approved by the County. If the Applicant or its successor fails to timely decommission the Solar Facility, the property owners shall commence decommissioning activities in accordance with the decommissioning plan. Following the completion of decommissioning of the entire Solar Facility arising out of a default by the Applicant or its successor, any remaining security funds held by the County shall be distributed to the property owners in a proportion of the security funds and the property owner's acreage ownership of the Solar Facility.

e. *Applicant/Property Owner Default; Decommissioning by the County.*

i. If the Applicant, its successor, or the property owners fail to timely decommission the Solar Facility, the County shall have the right, but not the obligation, to commence decommissioning activities and shall have access to the property, access to the full amount of the decommissioning security, and the rights to the Solar Facility equipment and materials on the property.

ii. If applicable, any excess decommissioning security funds shall be returned to the current owner of the property after the County has completed the decommissioning activities.

iii. Prior to the issuance of any permits, the Applicant and the property owners shall deliver a legal instrument to the County granting the County (1) the right to access the property, and (2) an interest in the Solar Facility equipment and materials to complete the decommissioning upon the Applicant's and property owner's default. Such instrument(s) shall bind the Applicant and property owners and their successors, heirs, and assigns. Nothing herein shall limit other rights or remedies that may be available to the County to enforce the obligations of the Applicant, including under the County's zoning powers.

f. *Equipment/building removal.* All physical improvements, materials, and equipment related to solar energy generation, both surface and subsurface components, shall be removed in their entirety. The soil grade will also be restored following disturbance caused in the removal process. Perimeter fencing will be removed and recycled or re-used. Where the current or future landowner prefers to retain the fencing, these portions of fence would be left in place.

g. *Infrastructure removal.* All access roads will be removed, including any geotextile material beneath the roads and granular material. The exception to removal of the access roads and associated culverts or their related material would be upon written request from the current or future landowner to leave all or a portion of these facilities in place for use by that landowner. Access roads will be removed within areas that were previously used for agricultural purposes and topsoil will be redistributed to provide substantially similar growing media as was present within the areas prior to site disturbance.

h. *Partial Decommissioning.* If decommissioning is triggered for a portion, but not the entire Solar Facility, then the Applicant or its successor will commence and complete decommissioning, in accordance with the decommissioning plan, for the applicable portion of the Solar Facility; the remaining portion of the Solar Facility would continue to be subject to the decommissioning plan. Any reference to decommissioning the Solar Facility shall include the obligation to decommission all or a portion of the Solar Facility whichever is applicable with respect to a particular situation.

PLANNING COMMISSION ACTION

The Planning Commission has three options:

a. Recommend approval of the application with written reasons for its decision.
b. Recommend denial the application with written reasons for its decision.
c. Defer the application for further discussion and consideration.

Draft Planning Commission Actions

Option 1 – Recommend approval of the application with the stated (or amended) conditions

I move that the Meherrin Solar, LLC's proposed 60-megawatt photovoltaic solar energy facility as described in SP-5-18, sufficiently mitigates adverse impacts associated with the project if approved with the conditions as outlined herein and recommended by the Planning Commission.

Option 2 – Recommend denial of the application

I move that the Meherrin Solar, LLC's proposed 60-megawatt photovoltaic solar energy facility as described in SP-5-18, does not sufficiently mitigate the adverse impacts associated with the project and should therefore be recommended for denial. Among other concerns, the Planning Commission finds that,

1. The proposed solar energy facility does not preserve the rural character of the County.
2. The use is of such a nature or located so as to exercise a detrimental influence on the surrounding neighborhood.
3. The proposed solar energy facility does not incorporate sufficient buffers to address the impacts on adjacent areas.
4. The application property is designated in the future land use plan as Rural Residential and is planned for agricultural and farming uses and the 846 acre solar energy facility is inconsistent with this designation.
5. The Comprehensive Plan indicates that solar energy facilities may be acceptable if not detrimental to surrounding areas and the proposed facility encroaches on existing residential and agricultural uses.
6. Concern regarding the decommissioning of the proposed solar energy facility, such as, financial assurance that the facility will be properly removed and restoration of the application property to its agricultural uses.

Option 3 – Deferral of the application

I move that the Planning Commission defer a decision on Meherrin Solar, LLC's request regarding its proposed 60-megawatt photovoltaic solar energy facility SP-5-18, until the Planning Commission meeting scheduled to begin at _____ p.m. on _____, in the Board of Supervisors meeting room.

Attachments:

A – SUP Application, dated May 18, 2018 and revised and resubmitted on July 6, 2018
B – Pearson's Appraisal Services Assessment Opinion

Meherrin Solar Project,
Greensville County, VA

Special Use Permit Application

Stantec

Prepared for:
County of Greensville, Virginia
1781 Greensville County Circle
Emporia, VA 23847

Prepared by:
Stantec Consulting Services Inc.
5209 Center Street
Williamsburg, VA 23188

On Behalf of:
Meherrin Solar, LLC

May 18, 2018,
Updated per County Comments on
July 6, 2018

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1.0 SPECIAL USE PERMIT APPLICATION

STAFF CONSULTATION
SPECIAL USE REQUEST

Description of request: Construction of a solar energy facility in an Agricultural (A-1) district (see attached documents)
Tax Map/Parcel: see attached Lot Size: see attached Elect. Dist.:_____ Zoned: A-1
Existing Uses: Agriculture
Proposed Uses: Solar Photovoltaic Generation
Relative Code Sections: (copy attached) _____

Application Deadline: _____
Contact: Agent/Owner: Rachel Vanasse Phone: (819) 561-2722 ext 6538
Mailing Address: 41 Victoria Street, Gatineau, QC J8X 2A1

==========

Application on public file ____
WITH APPLICATION PROVIDE:
Plat/sketch of property showing all existing and proposed improvements ____
Septic Permit ____

Copy application to
VDOT ____
Health Department ____
Building Official ____
GCWSA ____
Write Notice Dates: _____, _____ & _____ ____
Field Inspection ____
Write staff report ____
(Staff may reserve recommendation until all facts are obtained and reviewed. Applicant will receive report before hearing.)
1 week before Planning Commission hearing send package ____
1 week before hearing notify adjacent property owners ____
1 week before PC hearing notify applicant ____
(This may be the only notice of any future meetings.)
PC hearing (Date/time/place) _____
PC recommendation to BOS ____
(May recommend approval, approval with conditions, or deny. May also defer for up to 90 days*.)
Day after PC meeting send package to BOS ____
BOS hearing (Date/time/place)_____
Decision by BOS ____
(May approve, approve with conditions, or deny. May also defer up to 365 days.)
Results letter to applicant ____
NOTES WITH APPLICANT:
Other options are: _____

* Board of Supervisors will not hold hearing.
Press package for all meetings ____
Fee:

Reviewed procedure: Date: May 17/18 R Vanasse
Agent/Owner Signature

COUNTY OF
1781 1781
GREENSVILLE
• V I R G I N I A •
...Growing Towards New Horizons

SPECIAL USE PERMIT

FILE #: _____

Owner **Agent/Applicant** (if different from owner)

Name: Meherrin Solar, LLC
Physical Address: 41 Victoria Street, Gatineau, QC J8X 2A1

Mailing Address: Same as above

Telephone: (819) 561-2722 ext 6538

Tax Map/Parcel Number(s)	Acreage(s)	Election District(s)
1. See attached Acreage Table (Section 11.0)	/	
2.	/	/

General Location: Along Route 633 (Pine Logging Rd), near the intersection of Route 627 (Brink Road) and Route 633

Current Zoning/Proffers	Existing Use	Proposed Use
1. A-1	/ Agriculture	/ Solar Photovoltaic Generation
2.	/	/

YOU MUST ATTACH A SURVEY PLAT OF PROPERTY WHICH INCLUDES A SCHEMATIC DRAWING OF THE PROPOSAL SHOWING BUILDING HEIGHT AND PLACEMENT, PARKING AREA(S), STORAGE AREA(S), UTILITIES, ETC.

Detail Description of Request (Address impact of proposal on check list items):
See attached documents

Justification: See attached documents

The foregoing information is complete and correct to the best of my knowledge. I acknowledge that representatives of Greensville County may inspect the property subject to this application and my permission to do so is hereby given.

Signature: [signature] Date: May 17, 2018
(Agents must provide written documentation of authority)

Received by: _____ Date: _____

Planning Commission Action: _____

Board of Supervisors Action: _____

COUNTY OF
GREENSVILLE
• VIRGINIA •
...Growing Towards New Horizons

GREENSVILLE COUNTY
SPECIAL USE PERMIT
CHECK LIST

HEALTH, SAFETY, AND WELFARE:

Traffic: see attached documents (Section 4.0)

Noise: see attached documents (Section 4.0)

Lights: see attached documents (Section 4.0)

Dust: see attached documents (Section 4.0)

Fumes: see attached documents (Section 4.0)

Vibrations: see attached documents (Section 4.0)

Operations (Outside storage of materials, screening): see attached documents (Sections 4.0 & 6.0)

Hours of Operation: N/A

Number of Employees: N/A

Type of Equipment: see attached documents

Signage: see attached documents (Section 4.0)

COMPREHENSIVE PLAN (Compatibility): see attached documents

DATE: _____

TO: Treasurer, Greensville County, VA
1781 Greensville County Circle, Room 132
Emporia, VA 23847

REAL ESTATE TAX INFORMATION SHEET

Tax Map #: _____

Acreage: _____

Owner of Property: _____
As recorded in Clerk's Office

Real Estate taxes paid through year: _____

Amount Due/Year(s) _____ _____

_____ _____

Remarks: _____

_____

Prepared by: _____

Please return to: Linwood E. Pope, Jr.
Planning Director

2.0 PROJECT DESCRIPTION

Meherrin Solar is a solar photovoltaic generation project proposed for Greensville County located west of Pine Logging Road, east of Fountain Creek Road, and south of the intersection of Brink Road and Pine Logging Road. Another section is located east of Pine Logging Road and south of the Brink Substation. It will produce up to 60 MW (alternating current), connecting to the Dominion power grid at the Brink Substation on the east side of Pine Logging Road. The project will provide adequate electric power for about 9,500 average homes, with solar panels sited on approximately 478 acres of the land (based on the current preliminary site plan).[1]

The current and expected design employs predominantly single-axis tracking technology, meaning it will use solar panels mounted on a framework that tracks the movement of the sun during the day. In a limited number of locations, site characteristics may require the use of fixed mount racking. This project has a simple modular design that is repeated often. It consists of the mounted panels, inverters that are necessary to convert DC to AC power, transformers that boost the voltage to get it into the power grid, along with meters, safety switches, and wire combiners are to be expected.

Visually, the project will appear as long rows of solar panels mounted on posts and horizontal supports. All solar panels will be less than 10 feet high; they have no emissions of any kind and will produce no noticeable noise in the community. The project will be built primarily on flat, currently forested and/or open land, away from wetlands, and result in no additional runoff. Unlike the majority of electric generating facilities, solar farms do not require municipal water for cooling purposes.

The completion of the sale of electricity from the project to a third party is expected to occur as the project is developed and will be completed prior to the start of commercial operations. Meherrin Solar is strategically located within Dominion's territory, labeled the "epicenter of the Internet", and is expected to become the largest data center market in the U.S. by 2020. Dominion's service territory is one of the few areas experiencing load growth, primarily due to data center growth. Brookfield (the developer) is actively marketing the project's output to potential third parties including large commercial and industrial users who are looking to contract their energy supply needs with new "green" energy products, namely wind and solar. Brookfield also has the ability to bundle the output from the Meherrin Project with a number of different Brookfield-owned hydroelectric generation facilities located within PJM creating a baseload renewable energy product (24x7x365) capable of providing "green" energy throughout each and every day. Output from the facility will also be marketed to existing utilities electric cooperatives and municipalities located within the PJM market.

Currently, this project has passed through PJM's interconnection "feasibility study," "impact study", and "facility study." An initial 40MW Interconnection Service Agreement (ISA) and Interconnection Construction Service Agreement (ICSA) have been executed, and PJM is

[1] The area within the fence line is 478 acres. The entire project area is 846 acres.

developing the requisite agreements to add the final 20MW ac to the current 40 MW ISA and ICSA. Stantec, an independent consulting firm, has completed the following studies: Wetland delineations, which have been confirmed by the US Army Corps of Engineers; Cultural Resource Studies coordinated through the Virginia Department of Environmental Quality and Virginia Department of Historic Resources; Threatened and Endangered Species Habitat study in coordination with the Virginia Department of Game and Inland Fisheries and the Virginia Department of Conservation and Recreation; and a Phase 1 Environmental Site Assessment on the majority of the project with the only exception being the parcels recently incorporated into the project that are east of Pine Log Road. Stantec will be conducting the same studies on the parcels east of Pine Log Road with the goal of completing all environmental assessments by the end of 2018. Stantec is also working with the Virginia Department of Environmental Quality on the Meherrin Solar Permit By Rule and expects to complete the state permit in 2019.

3.0 PRELIMINARY SITE PLAN

Figure 3-1: Preliminary Site Plan – Overall View of Project Site

Figure 3-1-1: Preliminary Site Plan – Enlarged View West of Pine Logging Road

Figure 3-1-2: Preliminary Site Plan – Enlarged View East of Pine Logging Road

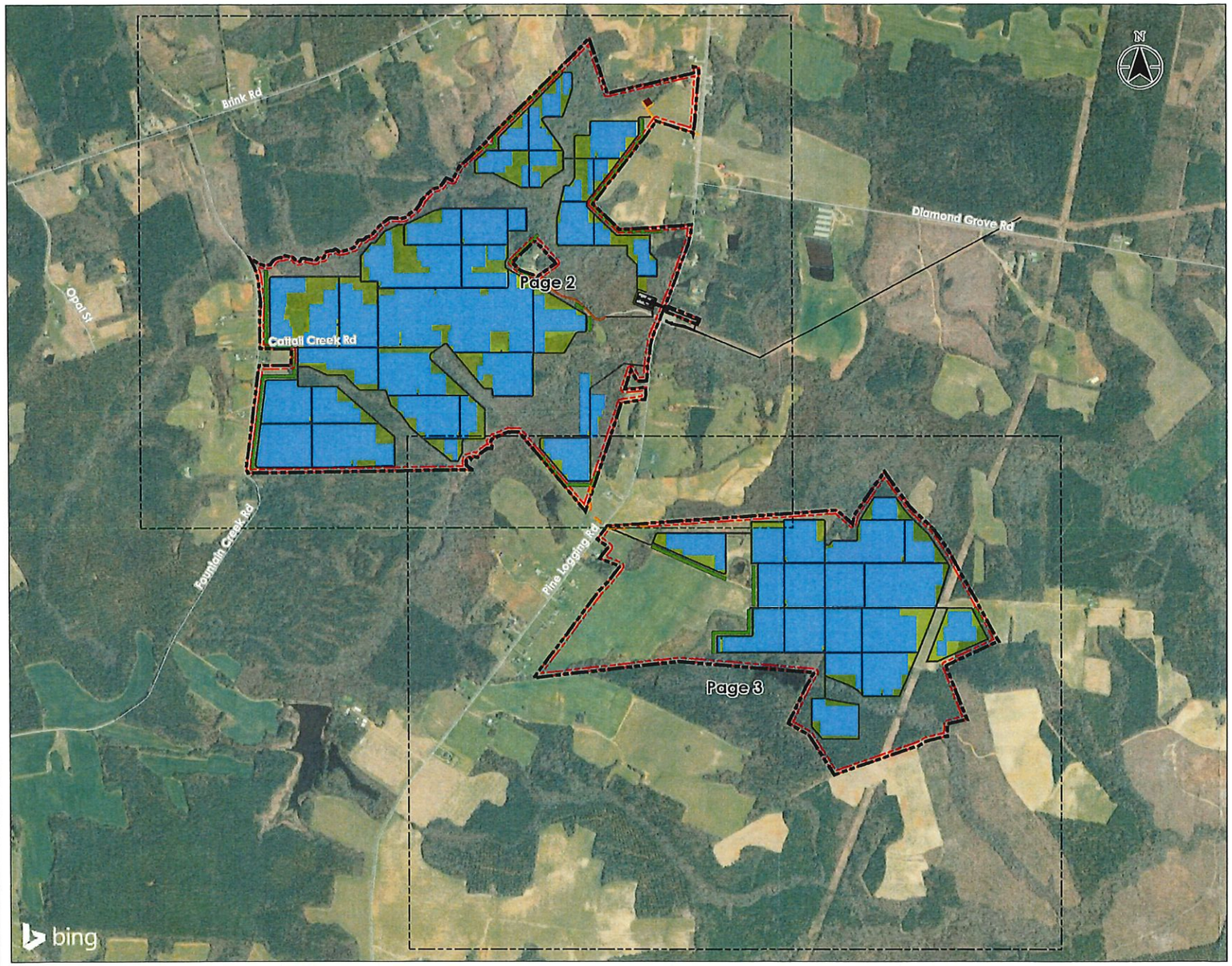

Figure No.
3-1

Title
Preliminary Site Plan
Overall View of Project Site

Client/Project
Meherrin Solar LLC
Meherrin Solar Site

Map Date: 2018-05-18
Revised Date: 2018-07-06

Project Location
Greensville County, Virginia

203400930
Prepared by JMH on 2018-04-02
Technical Review by ECL on 2018-04-03
Independent Review by JLO on 2018-04-06

0 1,400 2,800 Feet
1:16,800 (At original document size of 11x17)

- Page Index
- Project Limits
- Fenced Area
- Solar Panels
- New Project Substation
- Inverter
- Minimum 50-Foot Planted Buffer
- Cell Tower
- 50-Foot Buffer
- Project Road
- Cattail Creek Road
- Cell Tower Road
- Underground Electric Crossing

Site Data

Project Area	846.45 Acres ±
Fenced Area	477.54 Acres ±

Notes
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Project Emits provided by Brookfield Renewable
3. Site plan layers provided by RINA, revised by Stantec, July 2018
4. Orthoimagery © Bing Maps
5. Microsoft product screen shot(s) reprinted with permission from Microsoft Corporation

Stantec

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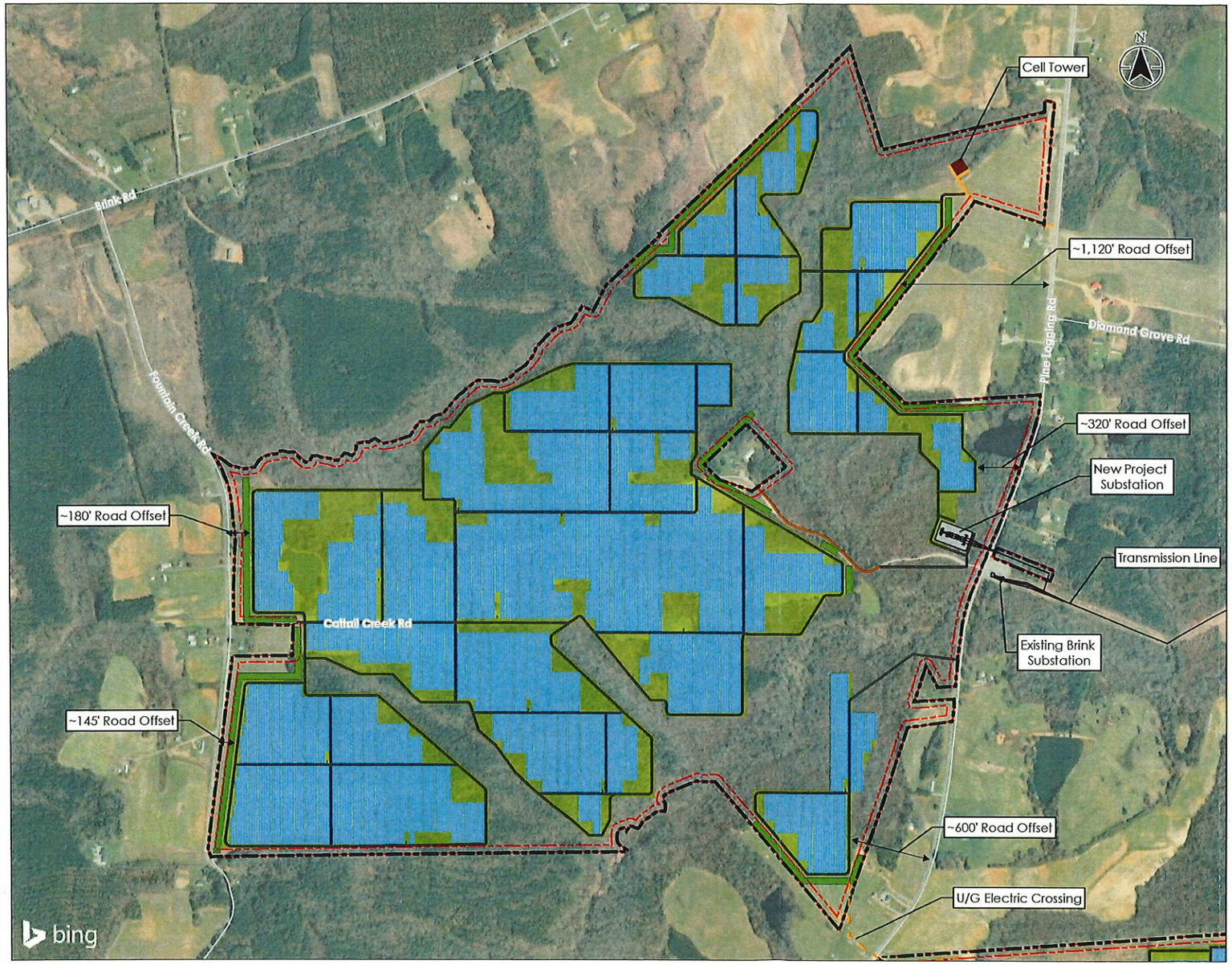

Figure No.
3-1-1

Title
Preliminary Site Plan
Enlarged View West of Pine Logging Road

Client/Project
Meherrin Solar LLC
Meherrin Solar Site

Map Date: 2018-05-18
Revised Date: 2018-07-06

Project Location
Greensville County, Virginia

203400930
Prepared by JMH on 2018-04-02
Technical Review by ECL on 2018-04-03
Independent Review by JLO on 2018-04-06

0 750 1,500 Feet
1:9,000 (At original document size of 11x17)

- Project Limits
- Fenced Area
- Solar Panels
- New Project Substation
- Inverter
- Minimum 50-Foot Planted Buffer
- Cell Tower
- 50-Foot Buffer
- Project Road
- Cattail Creek Road
- Cell Tower Road
- Underground Electric Crossing

Site Data

Project Area	846.45 Acres ±
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Notes
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
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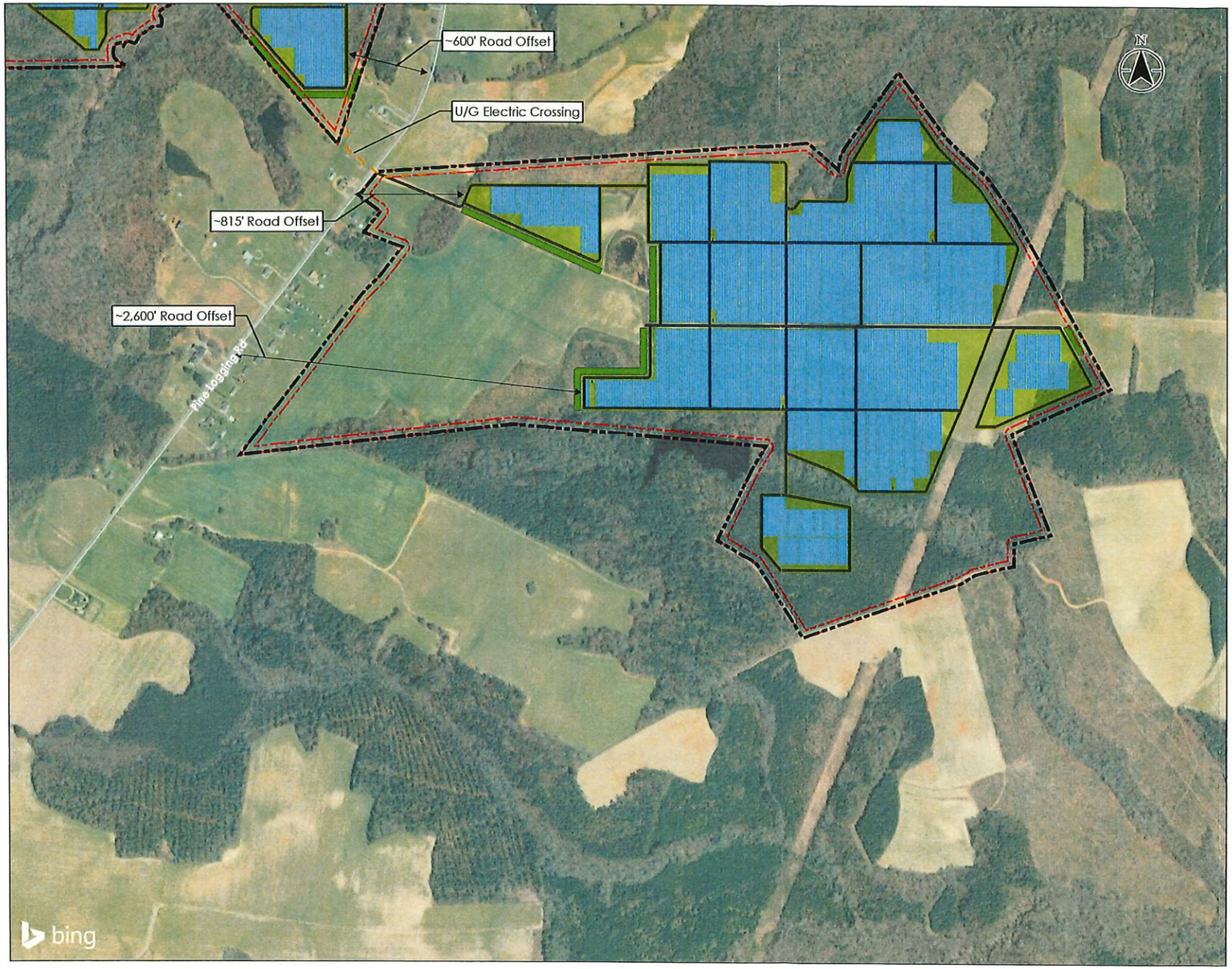

Figure No.
3-1-2

Title
Preliminary Site Plan
Enlarged View East of Pine Logging Road

Client/Project
Meherrin Solar LLC
Meherrin Solar Site

Map Date: 2018-05-18
Revised Date: 2018-07-06

Project Location
Greensville County, Virginia

203400930
Prepared by JMH on 2018-04-02
Technical Review by ECL on 2018-04-03
Independent Review by JLO on 2018-04-06

0 750 1,500 Feet
1:9,000 (At original document size of 11x17)

- Project Limits
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- Solar Panels
- New Project Substation
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- Minimum 50-Foot Planted Buffer
- Cell Tower
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Site Data

Project Area	846.45 Acres ±
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4.0 SUGGESTED CONDITIONS

Meherrin Solar, LLC (the "Applicant") as contract purchaser, and owners of the Properties as defined below in the Subject Property Owner Descriptions, and further pursuant to §15.2-2298 of the Code of Virginia (1950 as amended) and the Zoning Ordinance of Greensville County, for itself and its successors or assigns, proposes that the development of the site which consists of 15 individual parcels (see Sections 11 and 12 for individual parcel information), herein after referred to as the "Property," will be developed according to the following conditions if, and only if, the permit request to A-1 with a Special Use Permit ("SUP") is granted. The owners of the Property have voluntarily entered into the conditions contained herein (see Property Owner Agreements in Appendix A). In the event the request is denied or approved with conditions not agreed to by the Applicant, the conditions shall immediately be null and void and of no further force or effect.

1. Use Exceptions Pursuant to SUP (Sec. 16-2 of the Zoning Ordinance): The use of the Property shall be limited to:

   A. Electrical generating facilities, to include solar photovoltaic power generation facilities ("Solar Facility").

   B. Accessory uses such as associated substations, meteorological towers, and communications equipment related to use and operation of a permitted use on the Property, switching yards, transformer stations, above-ground electrical lines, above ground and underground utilities, and other similar facilities.

   C. Any use permitted by right in the Agricultural (A-1) district.

   D. The design and installation of solar electric generating facilities in the state of Virginia is governed by the National Electrical Code (NFPA 70). Specific sections of the code that apply to this type of facility include but are not limited to;
      - 110 (Requirements for Electrical Installations) – This section includes requirements for guarding of electrical equipment and clearances to live parts. It also specifies fencing must be a minimum of 6' mesh with 1' of barbed wire, or 7' of mesh.
      - 240 (Overcurrent Protection) – Overcurrent protection devices will be sized and evaluated per this section.
      - 250 (Grounding and Bonding) – This section includes specific requirements on acceptable installation of equipment bonding and grounding as well as integration to the existing building grounding system.
      - 310 (Conductors for General Wiring) - All DC and AC conductors will be sized and installed per requirements in this section.
      - 690 (Solar Photovoltaic Systems) – This section is specific to PV systems, including requirements for grounding, wiring, labeling, and disconnection

of the PV system.

- 705 (Interconnected Electric Power Production Sources) – This section dictates how the PV system will interconnect with the existing building service.

The 2011 version of the National Electric Code currently governs the design and construction of Virginia solar electric generating systems. However, Commonwealth of Virginia is in the process of adopting the 2014 version of the Code and solar facilities currently in development will be designed based on the 2014 version. With regards to PV specific equipment, the racking, inverters, and panels are tested and certified to UL and IEEE standards. Furthermore, industry standard practices will be employed in the design and install of the system at all times.

2. Construction Management and Mitigation: The Applicant's construction activities on the Property shall be subject to the following conditions and requirements.

   A. Construction Management Plan. The Applicant shall prepare a "Construction Management Plan" for each applicable site plan for the Solar Facility, and each plan shall address the following:

      i. Traffic control methods (Please note that site access and traffic control measures will be coordinated with the Virginia Department of Transportation [VDOT] prior to initiation of construction):
         1. Lane closures,
         2. Signage, and
         3. Flagging procedures.
      ii. Site access planning. Directing employee and delivery traffic to minimize conflicts with local traffic.
      iii. Fencing. The Applicant shall install security fencing prior to intensive construction activities occurring on the Solar Facility project.
      iv. Lighting. During construction of the Solar Facility, any temporary construction lighting shall be positioned downward, inward, and shielded to eliminate glare from all adjacent properties. Emergency and/or safety lighting shall be exempt from this construction lighting condition.

   B. Construction Mitigation Plan. The Applicant shall prepare a "Construction Mitigation Plan" for each applicable site plan for the Solar Facility, and each plan shall address the following:

      i. Dust mitigation – Minimal grading is anticipated for the project and soil disturbance should be less than that of typical agricultural operations. However, the following dust control measures will be implemented as necessary:

- Water – Dependent upon atmospheric conditions water shall be applied to all access and temporary construction roads up to three times per day. This will keep dust caused by construction traffic from becoming airborne. The amount of water applied during each application will be carefully controlled to avoid any erosion issues.
- Vegetation – Areas that have been graded or are otherwise in bare soil conditions shall be seeded and stabilized as soon as practicable.
- Polymers – A polymer tackifier can be applied which acts to bond individual soil particles together and forms a flexible crust strengthening the surface of the soil. This can only be done in areas that do not receive construction traffic.
- Stone – Permanent access and service roads will be covered with stone as soon as practicable.

ii. Smoke and burn mitigation- Debris left behind after clearing operations at the site will be disposed of through burning. Alternative methods, such as chipping, have too many negative effects on the establishment of grasses, forbs, and wildflowers which are critical to stabilizing the site and providing the intended wildlife benefits and pollinator habitat. Chips can prevent the contractor from getting sufficient seed to soil contact and reduce the germination rate of the initial seeding as well as change soil pH and tie up essential nutrients as they decompose. Hauling chips offsite will result in more compaction onsite as well as disruption to the surrounding community due to the volume of trucks needed to handle the task.

Unfortunately, there is no way to eliminate all smoke when fire is used however, the Applicant will follow the guidelines provided by the State Air Pollution Control Board and the Virginia Department of Forestry, who regulate open burning in the state, to manage any burning and the associated smoke. At a minimum, the following steps will be adhered to:

- Notify the Greenville County Fire Department and the local office of the Virginia Department of Forestry prior to initiating the burn in case calls come in from the public.
- If required by one of the above agencies, a written Burn Plan will be created prior to conducting the burn.
- Obtain and use the best available weather data. Be especially mindful of wind direction and speed as well as humidity.
- Comply with provisions of the Virginia Air Pollution Control Board Regulations covering open burning and with Virginia Forest Fire Laws.
- Burn when atmospheric conditions are good for rapid dispersion of

smoke. The atmosphere should be slightly unstable so smoke will rise and dissipate, but not so unstable as to create control problems.

- Highway visibility must be considered. Be prepared to attempt to extinguish the burn and to request assistance in traffic control from local law enforcement if an unexpected wind shift occurs. Smoke warning signs should be placed along all roads where visibility could be reduced by smoke prior to initiating the burn.
- Notify the local fire department and office of the Virginia Department of Forestry prior to initiating the burn.
- All fires should be allowed to burn out no later than one (1) hour before sundown as predicting smoke drift is more difficult at night.

iii. Measures to limit specified construction activities between the hours of 7:00 p.m. and 7:00 a.m. that occur within five hundred (500) feet of any off-site residence existing at the time that these conditions are accepted by the Board of Supervisors,

iv. Construction Access and Road Improvements. Primary access to the Property during construction of the Solar Facility shall be by way of Pine Logging Road and Fountain Creek Road. Applicant will improve the portions of such roads as may be required by the Virginia Department of Transportation. Such improvements, if necessary, shall be completed in accordance with a phasing plan to be included with the Construction Management Plan, and

v. Procedure for receiving and responding directly to issues raised by adjacent and nearby landowners or the County regarding matters covered by the Construction.

C. Concept Plan/Site Plan. The Project shall be developed in substantial compliance with the county approved Concept Plan/Site Plan as submitted in this application.

D. Erosion and Sediment Control Plan. The owner or operator shall construct, maintain and operate the Project in compliance with the county approved Erosion and Sediment Control Plan.

E. Stormwater Management and Erosion and Sediment Control Plan. The owner or operator shall construct, maintain and operate the Project in compliance with the County/DEQ approved Storm Water Management Plan.

F. Project Screening and Vegetation Plan. The owner or operator shall construct, maintain and operate the facility in compliance with the county approved Project Screening and Vegetation Plan.

3. Operations: Post-construction operations of the Solar Facility shall be subject to the following conditions and requirements.

   A. Permanent Security Fence. The Applicant shall install a permanent security fence around the Solar Facility project. Such installation shall occur prior to operations for the project. All fencing shall be in compliance with the Unified Facilities Criteria for Security Engineering as published by the United States Department of Defense. The fence shall be chain link, two-inch square mesh, six (6) feet in height surmounted by three strands of barbed wire angled outward at a forty-five degree angle for a total height of seven feet.

      The maintenance of the security fence is mandated through the granting of this Special Use Permit and by the applicant's liability insurance policy. Failure to maintain the fence in a functional condition can result in revocation of the permit or loss of insurance coverage. Either event would force the applicant to cease operation of the facility, at which time, if the applicant does not bring the site into compliance with permit requirements, the decommissioning security account can be used to remove all equipment and restore the site to its pre-existing condition. Therefore, no additional security fund is necessary for the county to maintain the security fence.

   B. Lighting. Any on-site lighting provided for the operational phase of the Solar Facility shall be shielded away from adjacent properties and shallbe positioned downward to minimize light spillage onto adjacent properties.

   C. Noise. The Applicant will implement noise attenuation measures to ensure that noise levels attributable to commercial operations of any electric generating facilities will be kept at or below tolerable thresholds. With the exception of the transformers located at the substation, the inverters are the only equipment component on site that produces any noticeable noise. The specification sheet for the inverters that are envisioned for use at this facility are rated to operate at a noise level of 79dBA. Even in idealized sound travel conditions, the inverse square law, which assumes exactly equal sound propagation in all directions, shows that, at 100 feet, the sound emitted from an inverter will be under 50 dBA. It should also be noted that since the facility will only be operational during the day, there will be no noise emitted at night.

   D. Site Entrance. Permanent entrance ways and parking areas (excluding on site travel ways) for the Solar Facility shall be maintained in a manner that will keep dust to a minimum so as not to adversely impact adjacent properties. As specified in the Dust Management section of the discussion on Construction Mitigation, permanent access roads and parking areas will be stabilized with gravel, and dust will be minimal.

4. General:

A. Buffer/Setback Exceptions Pursuant to SUP (Sec. 16-2 of the Zoning Ordinance).

i. A variable width buffer will be provided where the Property abuts lands owned by others (the "Property Buffer"). At a minimum, a fifty (50) foot buffer/setback (consisting of existing trees and vegetation) shall be maintained. Fallen, diseased, or dead plant growth may be removed from this Property Buffer. If there is no existing vegetation, a triple row of trees/shrubs will be planted on approximately 10-foot centers in the 25 feet immediately adjacent to the security fence. These plants will be specifically selected to provide the primary year-round evergreen screen of solar components including the security fence however they will not attain a height that should cause shading on any of the solar panels. In addition, pine seedlings will be installed in the remaining 25 feet of the 50-foot buffer. While pines do not typically have the dense canopy associated with the plants that will be in the primary screen, they grow quickly and will aid in establishing a visual screen while the primary screen is maturing. The Property Buffer shall allow the inclusion of (i) power lines, (ii) gravel roads/entrances, (iii) guardhouses, (iv) security gates, fences and related facilities, (v) various utility easements and related facilities, (vi) stormwater facilities, and (vii) erosion and sediment control facilities.

ii. A minimum one-hundred (100) foot setback, which includes a 50-foot planted buffer as described above when necessary, shall be maintained from street centerline where the Property abuts any public right-of-ways, as such right- of-ways may be reconfigured or relocated prior to or concurrent with any construction activities related to the Solar Facility. In some cases, existing vegetation that will remain is sufficient to provide a screen, however, if needed, Meherrin Solar will follow the planting scheme described above within the 50-foot portion of the setback adjacent to the project's security fencing. In all cases, it is the applicant's intention to provide a vegetated visual screen (either existing or planted) on all sides of the project. A final planting plan will be included in the final construction plans for the project. The Road Buffer shall allow the inclusion of (i) power lines, (ii) gravel roads/entrances, (iii) guardhouses, (iv) security gates, fences and related facilities, (v) various utility easements and related facilities, (vi) stormwater facilities, and (vii) erosion and sediment control facilities. The current site plan provides for no less than a 145-foot setback along all roads.

iii. The applicant will provide a plan for monitoring the heath and survival of all planted material and replace as necessary to maintain the intended visual screen. A replacement warranty will be obtained from the landscape contractor which will ensure replacement of any dead or

dying plant material during the first two (2) to three (3) years after installation. This initial establishment period is the most critical and the period when the greatest plant mortality should be expected. However, the applicant will assume responsibility at the end of the warranty period for replacing any plant material required to maintain the visual screen.

iv. The applicant will not harvest any of the natural visual buffer provided by existing forest with the exception of dead, dying, or diseased specimens that pose a threat to people or property. Trees that are deemed to be detrimental to the operation of the project due to shading may also be removed. If in any case the removal of an existing tree negatively effects the visual screening of the project, replacement plantings will be made.

v. The success of all buffers is mandated through the granting of this Special Use Permit. Failure to maintain the visual screen supplied by this vegetative buffer can result in revoking the permit and forcing the applicant to cease operation of the facility, at which time, if the applicant does not bring the site into compliance with permit requirements, the decommissioning security account can be used to remove all equipment and restore the site to its pre-existing condition. Therefore, no additional security fund is necessary for the landscaping.

B. Height Exceptions Pursuant to SUP (Sec. 16-2 of the Zoning Ordinance). Structures associated with any electric generating facilities, including towers constructed for electrical lines, may exceed the maximum permitted height as provided in the A-1 zoning district regulations, provided that no structure shall exceed the height of 25 feet above ground level.

C. Right of Entry and Inspection of Premises. The Applicant will allow designated County representatives or employees access to the facility at any time for inspection purposes provided such inspectors shall be subject to the Applicant's reasonable safety requirements and protocols while on the subject property. The County may compile reports of such inspections for the Director of Planning to confirm compliance with this condition.

D. The Applicant shall arrange a question and answer/training session with the Greensville Fire Department so that they will be familiar with any issues that are unique to a utility scale solar facility should a fire occur in or around the project.

E. Decommissioning. Within a reasonable time after the cessation of use of the Property for electrical power generation or transmission, or within 12 months after the end of the Lease, Company will remove all physical improvements, materials, and equipment (including security fencing) related to solar energy generation, both above and below ground, in its entirety to the greatest extent practicable, and the site shall be restored as described in the Decommissioning Plan, within 12

months of the abandonment or discontinuance of the use. In the event that a piece of an underground component breaks off or is otherwise unrecoverable from the surface, that piece shall be excavated to a depth of at least 36 inches below the ground surface so that it will not interfere with typical farming practices. The ground disturbance and interruption of the soil profile associated with extensive excavation will be more detrimental to crop production allowing small items to remain buried. Prior to construction, the company shall post or arrange for the posting of a Letter of Credit in an amount sufficient to ensure decommissioning of the solar facility and removal of the improvements from the Property consistent with standard industry practices. A letter of credit is a letter from a bank guaranteeing that a buyer's payment to a seller will be received on time and for the correct amount. In the event that the buyer is unable to make payment on the purchase, the bank will be required to cover the full or remaining amount of the purchase. Letters of Credit are commonly used in the construction industry in the United States and they have become a very important aspect of international trade. Banks typically require a pledge of securities or cash as collateral for issuing a letter of credit. Banks also collect a fee for service, typically a percentage of the size of the letter of credit.

The applicant will provide a detailed decommissioning plan and provide an independent engineer's estimate for the cost of decommissioning once the final location of the project infrastructure is determined through county consultation, and environmental and engineering studies. The applicant shall review the decommissioning plan and update the cost estimates based on current market pricing on every fifth anniversary of the Commercial Online date. The applicant will reimburse the county up to $5,000.00 to cover the cost of the initial 3rd party review. Subsequently, the applicant will reimburse the county up to $5,000.00 every 5 years to cover the cost of 3rd party review for updated decommissioning estimates. Any cost of 3rd party review that is over and above this sum will be the responsibility of Greensville County. The Letter of Credit intended to cover the cost of decommissioning will be adjusted to reflect any changes in cost after each of these estimations is finalized and agreed to by all parties.

For your information and comparison, the applicant has provided the results of a study of the decommissioning requirements currently in place in several other Virginia Counties (see Appendix C). The study includes a review of 12 counties' zoning ordinances that include specific decommissioning requirements and the permits of 27 solar generating facilities.

Upon termination of the Lease for any reason, the applicant shall promptly thereafter execute and record a release of all the applicant's rights, title and interest in any leased Property.

5.0 DECOMMISSIONING

5.1 DECOMMISSIONING AFTER CEASING OPERATION

It is anticipated that the project will have an operational lifespan of 25 or more years. The project life could be further extended with proper maintenance, component replacement and repowering. At the end of the project's useful life, it will first be de-energized and isolated from all external electrical lines.

Temporary erosion and sedimentation control measures will be implemented during the decommissioning phase of the project. These measures will be enacted with consideration of industry standard practices as well as State and local requirements at the time of decommissioning.

The project will include the installation of approximately 219,500 solar panels. Each solar panel will be mounted on a galvanized steel and/or aluminum rack system. Each panel will be disconnected from the electrical system and unfastened from the mounting rack. After removal of the panel from the rack, it will be placed in a vehicle or container for transportation off-site. The fixed racks that support the solar panels will be disassembled and removed from the site. Industry standards would result in recycling or re-using a majority of the components.

All physical improvements, materials, and equipment (including fencing) related to solar energy generation, both surface and subsurface components, shall be removed in their entirety. In the event that a piece of an underground component breaks off or is otherwise unrecoverable from the surface, that piece shall be excavated to a depth of at least 36 inches below the ground surface. The soil grade will also be restored following disturbance caused in the removal process.

Inverters and inverter step-up transformer skids, including associated piling, will be removed and shipped off site for eventual reuse or disposal. The piles and associated foundations will be removed from the site and disposed or recycled.

All work to decommission the overhead / underground connection line would be conducted within the boundaries of the project. Meherrin Solar, LLC is responsible for decommissioning up to the point of interconnection to the utility's equipment.

All above ground structures and electrical equipment including main power transformer (if applicable), circuit breakers, chain link fencing, and control building(s) will be removed. Material used to build up the area above original grade, including any gravel and fill, will be removed. Any concrete foundations will be removed to the depth originally installed to the greatest extent practicable. All granular and geotextile materials will be removed from the project location or placed in a designated on-site area for use by the landowner. All electrical system components will be taken off-site for reuse or disposal.

All access roads will be removed; this includes any geotextile material beneath the roads and granular material. The exception to removal of the access roads and associated culverts or their related material would be upon written request from the current or future landowner to leave all or a portion of these facilities in place for use by that landowner. All granular and geotextile materials will be removed from the site.

Where any access roads will be removed within areas that were previously used for agricultural purposes, topsoil will be redistributed to provide substantially similar growing media as was present within the areas prior to site disturbance.

Storage and operation infrastructure and any associated temporary decommissioning improvements (e.g., temporary construction trailer) used during the decommissioning phase will be removed from the site. Any foundations associated with these facilities will be removed to the depth originally installed to the greatest extent practicable.

Perimeter fencing will be removed and recycled or re-used. Where the current or future landowner prefers to retain the fencing, these portions of fence would be left in place.

5.2 SITE REHABILITATION/RESTORATION

The operator of the project at the time of decommissioning will develop a Rehabilitation Plan designed to restore agricultural lands and wildlife habitat in areas affected by the project.

The Rehabilitation Plan should include, but not be limited to the following:

- Agricultural and forested areas, which comprise the majority of the pre-developed project location, will be restored by redistributing topsoil to provide substantially similar growing media as was present within the areas prior to site disturbance to accommodate the return of active agricultural or silvicultural operations on the site.
- Access roads and other areas which may have become compacted during operation or decommissioning will be decompacted to pre-existing conditions.
- Restoration of any drainage tile that was impacted by the project and existing within the Project Location at the initiation of Project construction to the same condition or better condition than it was prior to project construction.

Where project infrastructure has been removed, disturbed areas will be immediately returned to agricultural and silvicultural conditions. Erosion and sediment control measures will be installed at ditches and will be left in place until ground cover is fully established.

Any proposed decommissioning work within or near streams or waterbodies would be discussed with Greensville County and other pertinent agencies to determine any applicable guidelines, permitting, site-specific mitigation and/or remediation plans. Similar mitigation and monitoring measures implemented during construction will be used during decommissioning of the project.

Measures are anticipated to include standard construction practices at the time of decommissioning including erosion and sediment control during removal of the structures.

Agricultural lands that have become compacted due to facility operation or decommissioning activities, such as access roads, would be decompacted using chisel ploughing and/or subsoiling, as determined by an environmental advisor or landowner.

In the event that the agricultural areas of the site are intended to return to production, any agricultural drain tiles capped or modified during construction, and/or damaged during construction, operation and/or decommissioning, would be repaired or replaced by a drainage tile contractor of the landowner's choosing.

5.3 COSTS

If granted the Special Use Permit, Meherrin Solar, LLC will, prior to construction, provide an independent engineer's estimate for the total cost of decommissioning. The applicant also agrees to review the decommissioning plan and update the cost estimate on every fifth anniversary of the Commercial Online date of the project. Furthermore, Meherrin Solar, LLC will reimburse the county up to $5,000.00 of the cost to obtain a third-party review of the initial decommissioning cost estimate. Subsequently, the applicant will reimburse the county up to $5,000.00 to cover the cost of third part review of updated decommissioning cost estimates every five years. Any cost associated with the third-party review of the initial decommissioning cost estimate and/or the subsequent periodic reviews of updated estimates that exceeds the amounts of these reimbursements by the applicant will be the responsibility of Greensville County.

Prior to construction the company shall post or arrange for the posting of Letter of Credit in an amount sufficient to ensure decommissioning of the solar facility and removal of the improvements from the Property consistent with standard industry practices. The amount of this Letter of Credit will be based upon the estimate of cost described above and will be adjusted after each subsequent updated estimate is made every five years and agreed to by all parties. A letter of credit is a letter from a bank guaranteeing that a buyer's payment to a seller will be received on time and for the correct amount. In the event that the buyer is unable to make payment on the purchase, the bank will be required to cover the full or remaining amount of the purchase. Letters of Credit are commonly used in the construction industry in the United States and they have become a very important aspect of international trade. Banks typically require a pledge of securities or cash as collateral for issuing a letter of credit. Banks also collect a fee for service, typically a percentage of the size of the letter of credit.

For your information and comparison, the applicant has provided the results of a study of the decommissioning requirements currently in place in several other Virginia Counties (see Appendix C). The study includes a review of 12 counties' zoning ordinances that include specific decommissioning requirements and the permits of 27 solar generating facilities.

6.0 PROJECT SCREENING AND VEGETATION PLAN

The vegetative cover at the Meherrin solar site currently consists of mixed species forest and agricultural fields. The forest land does not appear to be in active silvicultural management and consists of the typical forest species found in and around the project site. Noted species include sweetgum, red maple, poplar, red and white oak, and loblolly pine. Likewise, the agricultural fields did not appear to be in active production.

To complete the intended project some clearing of existing forest will be necessary; however, wherever possible, portions of the existing forest will be preserved on the perimeter of the site as well as in sensitive areas, such as wetlands. These untouched natural areas will provide valuable wildlife habitat. The mature hardwood trees will provide mast (hard seeds such as acorns) for food, while the pines and other evergreens will provide small seed and berries, which will be eaten by birds and small mammals, as well as winter cover. These areas will also provide travel corridors to allow animals to safely move from area to area. Most importantly, they will act as a visual screen between the solar facility and adjacent residences and roadways. A minimum 100-foot setback, with a minimum of 50 feet of that setback containing woody screening vegetation, will be provided along all highway right-of-ways. On interior property lines a minimum 50-foot vegetated buffer will be provided. Natural areas, within these buffers, will be left intact with the exception of the possible removal of any dead, dying, or diseased specimens that are deemed to pose a hazard to people or property. Meherrin Solar, LLC also reserves the right to selectively remove any trees that are determined to be negatively affecting the production of the facility based upon shading. However, they are committed to maintaining an effective visual screen for the project. Trees removed from within these buffer areas will be left on-site to minimize soil disturbance and provide coarse, woody debris. The fallen, decomposing plant material will provide a source of shelter for many small mammals while simultaneously returning nutrients to the soil. Standing dead trees, that do not present a threat, will be left in place to provide roosting opportunities for avian species.

In areas of the site where no natural buffer exists, one will be planted so that, within a reasonable time allotted for plant growth, a minimum 50 feet of woody vegetated screening is present along the entirety of the project perimeter. and the visual impact of the project is reduced to the greatest extent practicable. The primary visual screen will be provided by a triple row of evergreen trees/shrubs capable of achieving a mature height of at least 10 feet, which will be planted in the 25 feet immediately adjacent to the security fence. The final layout and specifications for the plant material used in this screen will be determined as construction plans are developed for the project. It is anticipated, however, that these plants will be installed on approximately 10-foot centers and that the installed size will be four to six feet. The remainder of the proposed 50-foot vegetative buffer will be planted with pine seedlings which will grow quickly and provide screening while the primary buffer matures and beyond (see figure X).

These planted buffers will be encouraged to naturalize, and so minimal maintenance is anticipated. A multi-year 100 percent survival warranty will be obtained from the landscape

contractor that installs the buffer plantings to cover the establishment period during which the highest mortality rates should be expected for the newly planted material. Following that, if at any point during the life of the project mortality of the planted woody material causes gaps in the buffer that negatively affects the views from adjacent residential properties or roadways, Meherrin Solar, LLC will replace that plant material. The replacement vegetation will be installed at a similar size to the original installation. The maintenance of the buffers is expected to be a condition of receiving a Special Use Permit for the project and so the applicant is legally bound to take measures to ensure the visual screen is present for the life of the project.

While a final planting plan has not been developed at this time, the following list contains some potential choices for creating the desired screen:

- wax myrtle (*Morella cerifera*),
- leatherleaf viburnum (*Viburnum rhytidophyllum*),
- Nellie R. Stevens holly (*Ilex x 'Nellie R Stevens'*),
- American holly (*Ilex opaca*),
- eastern red cedar (*Juniperus virginiana*),
- southern magnolia (*Magnolia grandiflora*),
- Virginia pine (*Pinus virginiana*), and
- loblolly pine (*Pinus taeda*).

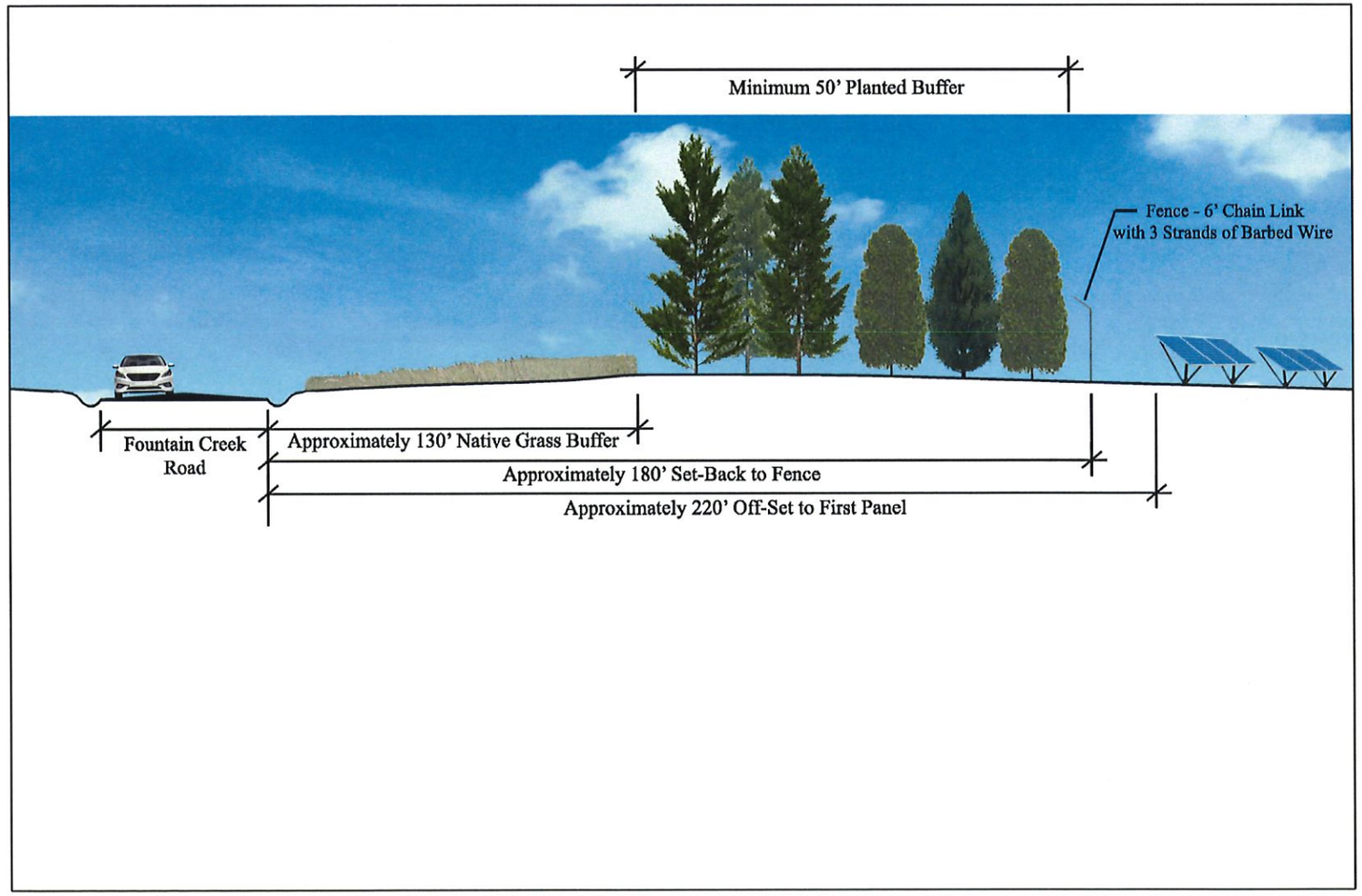
All cleared areas on the interior of the project, as well as any bare areas within buffers, will be seeded with a native grass/wildflower mix. The use of this native material will stabilize the site and prevent erosion and sediment transport as well as create habitat for small mammals and ground nesting birds. The inclusion of wildflowers will also establish pollinator habitat which has been determined to be rapidly disappearing. The use of native plant material will reduce the watering and fertilizer requirements because the plants are well adapted to the local environment. Repairs to the solar arrays may dictate the timing of some mowing to provide access; however, the intention is to mow the site no more than two times a year. This should be sufficient to maintain the grasses and discourage woody species from growing too close to the solar arrays. To avoid rutting, erosion, and soil compaction, weather forecasts will be consulted, and on-site field inspections will be conducted prior to mowing to ensure that the site is able to withstand the activity. Again, site plans have not developed to the point where a final seed mix has been determined, but the list below contains some possible species native to Greensville County:

- common yarrow (*Achillea millefolium*),
- autumn bentgrass (*Agrostis perennans*),
- butterfly milkweed (*Asclepias tuberosa*),
- partridge pea (*Chamaecrista fasciculate*),
- Virginia wild rye (*Elymus virginicus*),
- smooth panic grass (*Panicum dichotomiflorum*),
- blackeyed Susan (*Rudbeckia hirta*),
- little bluestem (*Schizachyrium scoparium*),

- wild senna (*Senna hebecarpa*), and
- early goldenrod (*Solidago juncea*).

As a part of overall site management, an Integrated Pest Management program will be put in place immediately following construction. As a part of this program, a trained ecologist/botanist who is familiar with the Virginia Department of Conservation and Recreation's list of Invasive Species will conduct a yearly walkover of the project during peak growing season. During this investigation, the presence of observed invasive species along with an estimated percent cover will be noted and the extents of any colonies field mapped. This data will be used to determine if there are any invasive species present in amounts outside of a tolerable threshold. If control is required, the project team will determine whether mechanical or chemical control is the best option to curtail its presence on the site. Should chemical control be needed, the applications will be made by Virginia Certified Pesticide Applicators trained in the proper use of herbicides. The specific chemicals used will be selected based upon the target species and site conditions and weather conditions will be evaluated prior to applying any chemicals to minimize the risk of wind drift or runoff due to precipitation. Broadcast applications will be avoided to the greatest extent practicable. In most cases, direct applications (spot spraying) will be made to the target species only.

Figure 6-1: Illustration of Planted Buffers



7.0 GRADING, STORMWATER MANAGEMENT, AND EROSION AND SEDIMENT CONTROL PLAN

Integrated Environmental Site Design (ESD) / Stormwater Management (SWM) Development Approach

Solar facilities, such as the one proposed, depend on exposure to the sun for success and therefore avoid steep slopes and low-lying portions of a site. This, coupled with the fact that construction will be accomplished using piling rather than concrete footers, allows the arrays to be set relatively level without mass grading to create a building pad. Therefore, less earthwork is typically associated with solar development than with the majority of other construction. The current status of the Meherrin Solar project does not allow us to provide a meaningful grading plan for Greensville County to evaluate at this time. Environmental constraints such as wetlands have not been determined for the entire project site and fully reliable topography has yet to be obtained. However, the intent will be to:

- Limit grading to the greatest extent practicable by avoiding steep slopes and laying out arrays parallel to landforms.
- An earthwork balance will be achieved on-site. No import or export of soil is intended.
- In areas proposed to be permanent access roads which will receive gravel or in any areas where more than a few inches of cut are required, topsoil will first be stripped and stockpiled on-site to be used to increase the fertility of areas intended to be seeded.
- Take advantage of natural flow patterns in drainage design and keep the amount of impervious surface as low as possible to reduce stormwater storage needs.

Once the project moves forward, the applicant will provide the county with Construction Plans which will include a grading plan, stormwater control plan, and erosion and sediment control plan for review and approval prior to obtaining a building permit and initiating construction. The Applicant will also provide a one-time sum of $10,000.00 to be used at the county's discretion in obtaining an independent third-party review of the construction plans or any part thereof.

The overall project approach to stormwater management will be developed with a focus on early identification and avoidance of key environmental features, which might lead to a more streamlined design development process and benefit local water quality, while reducing the upfront impact of the development. This approach will remain adaptive throughout the process so that new information may be incorporated swiftly to address new area sensitivity identified onsite or relevant citizen concerns as they arise during the project approvals phase.

The ESD site planning approach is core to the integrated stormwater strategy, which includes the following key components:

1. Maintaining forested wetland/stream buffers to the greatest extent practicable.
2. Limiting the disturbance footprint where at all practicable. Grading will be limited with a focus in maintaining the existing soil profile intact. Disturbance shall be limited where practicable to maintenance access paths and solar array foundation footprints.
3. Use of low growth, noninvasive turfgrasses incorporated with native grasses and wildflowers, as applicable for limited maintenance and the overall improvement of site hydrology to the extent practicable.

Stantec will prepare a comprehensive stormwater management plan, with detailed routings and calculations demonstrating consistency with the Virginia Stormwater Management Program (VSMP) Regulations Part IIB Technical Criteria and associated requirements for water quality and water quantity.

Where typical developments might have a relatively large disturbance footprint and land use change, the proposed development is not envisioned in this manner. It is understood that land cover change to impervious surface will be isolated to gravel access paths of limited area and array foundations only. Solar array placement will take advantage of natural sheet flow aspects of the site, and the intent to disturb as little area as possible will aid in maintaining the efficacy of the current soil profile. Accordingly, disturbance of higher infiltrative soils (such as hydrologic soil group B soils) will be limited to the greatest extent practicable.

The development team's approach aims to leverage the existing land use of the site and limit disturbance footprint to the greatest extent practicable. The general SWM approach is integrated with site planning and includes:

1. Targeting of areas of existing pasture or row crops for development,
2. Targeted development slopes less than or equal to 10%,
3. Focus on maintenance of sheet flow, with simplified drainage patterns (e.g. ditches if necessary, no pipes envisioned unless specifically needed for maintenance crossings or detention facilities),
4. Understanding access path construction with gravel surfaces will be the only impervious surface,
5. Understanding DEQ acceptance of solar array as pervious, array bases as impervious
6. Use of low growth, noninvasive turfgrasses incorporated with native grasses, as applicable for limited maintenance, and
7. Maintaining forested wetland/stream buffers to the greatest extent practicable.

Primarily disturbance avoidance and simple impervious disconnection or use of sheet flow will be sought. Additionally, and as necessary to meet either water quality goals or energy balance requirements under VSMP regulations, the site's stormwater management design will be supplemented with non-structural practices, possibly linked in treatment trains to increase effectiveness, which may include:

1. Grass swales,

2. Use of existing buffer as sheet flow treatment to conserved open space/vegetated filter strip,
3. Low head, simplified detention basins (non-water quality facilities) if additional quantity control is required that is not gained through runoff reduction practices, and
4. Potential use of modified gravel surfaces for potential volume credit (not water quality treatment), if applicable and acceptable as a detention/runoff reduction strategy by the VSMP Authority.

Relatively low stormwater quality compliance reduction requirements are anticipated given ESD and limited disturbance approach noted above. As such, water quality treatment is envisioned to be addressed onsite; however, the developer retains the option of leveraging onsite treatment facilities with the use of offsite compliance options. Currently, no local Total Maximum Daily Loads (TMDLs) or downstream impairments have been noted; however, this will be addressed in more detail as conceptual site planning and design commences.

Incorporation of Erosion and Sediment Control (ESC) Planning & Design into the ESD Approach

The ESC strategy for the site will be integrated into the general ESD approach. Principally, this will focus on the following:

1. The initial identification of key resources (wetlands/waters, soils, slopes, etc) that may be vulnerable, and that may require additional protection / management strategies, during construction
2. Limit erosion through avoidance and minimization of disturbance limits to the greatest extent practicable, in accordance with item number 2 under the stormwater management strategy above – "Limiting the disturbance footprint where at all practicable (e.g. no disturbance/grading in existing pasture or row crops except for those specific areas where construction of components is necessary). To the greatest extent practicable, grading will be limited with a focus in maintaining the existing soil profile intact. Disturbance shall be limited where possible to maintenance access paths and solar array foundation footprints."
3. Leaving existing site soil profile and herbaceous root structure intact, as applicable, to limit erosion.
4. Using existing stands of vegetation / herbaceous cover interior to the site to break up natural flow lengths, informally trapping sediments, as applicable.
5. Siting of temporary ESC measures within the footprints of proposed permanent stormwater management features, where feasible, seeking to limit additional proposed disturbance for temporary controls.
6. Utilizing clean water diversions, where feasible, to limit construction site "run on" from offsite areas, seeking to discharge these clean water diversions as sheet flow, as applicable.
7. Providing micro phasing (facility level) steps for these temporary ESC measures, as needed, for successful transition to permanent controls post-construction, limiting contamination and erosion/sedimentation risk with successive reworking / regrading of

features. Where applicable this phasing of permanent features will be tied to the postconstruction stormwater management record drawings to provide additional field contractor / quality control.

8. As part of the management approach, specific maintenance of individual ESC components will be required.
9. Providing a phased ESC overall approach for establishment of initial perimeter controls through permanent stabilization.

8.0 COUNTY BENEFITS

Revenue to Landowners

Landowners were given a choice to either sell or lease their land. Landowners who chose to lease their land for the development of the solar facility will receive a steady income for at least 25 years. Those landowners who chose to sell their land will be paid a premium to current market value.

Economic Benefits During Construction

Construction of the solar energy facility will employ several hundred workers (with the proper skills and experience). This will lead to workers and their families' spending money at local businesses. Building suppliers, rental organizations, landscapers, fencing contractors, electricians, laborers, and others will also experience increased business.

Increased County Revenue

Personal property taxes on machines and tools is expected to bring the County additional revenue in year one based on the total investment in the project, depreciating on a straight-line basis over 20 years per Virginia code 58.1 Chapter 26. Increases in property tax will be taken care of by the project, and the landowner will not have to deal with or pay any tax increases due to this project. Refer to Section 9.0 for additional information on expected revenue for the County.

Low Impact on County Services

Solar development is low impact and will not drain county resources. It does not require resources such as new roads and utilities (water, sewer, etc.) or additional law enforcement like other forms of development (commercial, residential, etc.).

Conservation of Land

Existing wetland and stream resources will be preserved to the greatest extent practicable and only the forestland integral to the project will be cleared. In addition, naturally wooded buffers will be preserved on the perimeter of the project where they exist, or landscaping will be added to assure a complete buffer around the project site. These preserved and landscaped areas will provide habitat and travel corridors for wildlife in the area. Soil will be left fallow for at least 25 years and up to 30 years or more. The annual decay of the native grass ground cover will add to the organic content of the soil. Furthermore, developing the land for solar will prevent other more intensive development that could possibly negatively affect the land.

Educational Opportunity

The site can serve as an educational opportunity for schoolchildren and the general public, alike. The community can come to learn more about solar energy generation and technology.

Clean Energy

Operation of the solar facility would result in an improvement in air quality over time. The facility would not emit harmful air pollutants or greenhouse gases and would reduce the need for traditional energy generating facilities, such as coal, natural gas, and oil power plants.

9.0 FINANCIAL IMPACTS

Meherrin Solar, LLC contracted Mangum Economic Consulting, LLC to assess the financial impacts the project will have on the county. The resulting report is attached in Appendix B. Based on this analysis, subject to revisions in project costs, personal property taxes on machines and tools is expected to bring the county between $96,000 and $109,000 in year one. This M&T tax calculation is based on the State's 80% tax exemption on an investment of $80 to $90 million, resulting in an assessment of $16 to $18 million. Applying the M&T property tax rate for Greensville County of $0.67 per $100, would result in an M&T tax assessment of $107,000 to $121,000. In year 1, the SCC published depreciation rate of 90% would be applied, resulting in M&T tax in year one payable to the County of $96,000 to $109,000.) Going forward, this initial amount ($96,000 to $109,000) would depreciate on an annual basis based on the SCC published depreciation rate for Greensville County. We calculate that over a twenty-five year life the county would receive over $1.6 to $1.8 million in new M&T tax.

An increase in real property values will result in a change in the Composite Index. The Department of Taxation issued a ruling in an April 6, 2017 letter from the Tax Commissioner that clarifies how the Composite Index would treat a solar project with the 80% exemption. The Tax Commissioner states "In response to your inquiry, in the event that the proposed solar farm is built and qualifies for the 80% exemption under VA Code § 58.1-3660, the Department will exclude the exempt value of the property from the true values of real estate and PSC property in the county." This treatment results in a county receiving net positive revenue from these large-scale solar farms. Further, as investments in other counties increase the Commonwealth's total value of real property the net revenue associated with a particular solar farm increases.

Based on our discussion with the Building Inspections Department, Greensville County would require an electrical permit for our solar project but not a building permit. Based on our current project estimate and applying the Greensville County Electrical Permit Fee rate of $4.50 per $1,000, would result in a one-time electrical permit fee of between $360,000 and $405,000 payable prior to the start of construction.

Property & Land Use Taxes will be paid in accordance with the established rates. However, we would expect any parcels currently in Land Use will be removed and taxed at the full assessed value. We estimate that the county will receive approximately $4,000 additional tax in year one and approximately $148,000 over a twenty-five-year life. In addition, we would expect to pay for five years of back taxes per the policy (based on discussion with the Commissioner of the Revenue's office). We calculate the back taxes to be around $20,000, not including penalties and interest. Landowners will not pay any tax increases or fees due to this project.

10.0 LAND USE AGREEMENTS

Meherrin Solar, LLC has obtained a Real Property Purchase Option Agreement, a Solar Energy Option Agreement, a transmission easement, or an electrical connection easement for the 15 parcels of land being used for the solar facility. These land use agreements can be found in Appendix A. It should be noted that some of these agreements were originally made to SolUnesco. SolUnesco has since sold the project to Meherrin Solar, LLC who will now be developing the project. Notice of this sale was given to the Virginia Department of Environmental Quality (DEQ) by SolUnesco on June 14, 2017 (see Appendix A). Subsequently, Meherrin Solar, LLC has submitted a Notice of Intent (also in Appendix A) to the DEQ stating that they intend to submit the necessary documentation for a Permit by Rule for a small renewable energy project.

Please note that the parcel limit lines depicted on the attached graphic are based upon GIS data available from Greensville County. A boundary survey will be conducted by a surveyor licensed in the State of Virginia prior to completing Construction Plans and initiating site work.

11.0 ACREAGE TABLE

Table 11-1
Acreage of Subject Property Parcels

Owner	Parcel No.	GPIN	Total Acres of Parcel (GIS)	Total Acres of Parcel in Project Limits (GIS)	Total Acreage Being Developed (GIS)*
Donald M. Driver, Linda H. Driver, Sheila D. Harp, and Michael A. Harp, Jr.	42-22	7338-52-3417	122.41	84.06	43.48
Ryan Harrell	42-25	7338-31-8404	11.96	11.96	4.28
Connie H. Harrell	42-26	7338-30-3452	72.01	72.01	56.34
Connie Harrell and April Paige Banner	42-27	7337-29-1769	35.34	35.34	31.21
Francis K. Hobbs	42-27A	7337-19-8782	1.18	1.18	1.18
Lois P. Allen	42-37	7337-19-0679	33.37	33.37	24.83
Lois P. Allen	42-37B	7337-09-5344	1.03	1.03	0.37
Lois P. Allen	42-37F	7337-09-5535	1.03	1.03	0.36
Gordon C. Williams, Jr.	42-39	7337-18-9177	121.53	121.53	90.44
Dane L. Little and Kellie B. Little	42-41	7337-57-3290	1.79	0.19	0.01
Dane L. Little and Kellie B. Little	42-41F	7337-48-6589	123.50	109.46	55.57
James S. Ferguson, Jr. and Sheila B. Ferguson	42-50	7337-65-7683	169.02	169.02	62.15
James S. Ferguson, Jr. and Sheila B. Ferguson	42-51	7337-95-2080	152.00	152.00	94.03
Willis Driver	42-55	7338-50-7623	53.41	53.41	13.29
Haywood D. Jones and Martha E. Jones	42B-4-12	7337-69-4508	1.79	0.85	0.00
		Total	901.37	846.44	477.54

*Developed area includes the area within the fence line based on the current site plan, which is subject to change based on final layout.

12.0 SUBJECT PROPERTY AND ADJACENT PROPERTY OWNER LIST

12.1 SUBJECT PROPERTY

Table 12-1
Subject Property Parcel Owners and Addresses

Parcel Number	GPIN	Subject Property Owners	Mailing Address	Option Executed?
42-22	7338-52-3417	Donald M. Driver, Linda H. Driver, Sheila D. Harp, and Michael A. Harp, Jr.	205 Beechwood Drive, Roanoke Rapids, NC 27870	Yes
42-25	7338-31-8404	Ryan Harrell	302 Williams Street, Roanoke Rapids, NC 27870	Yes
42-26	7338-30-3452	Connie H. Harrell	4745 US Highway 301, Pleasant Hill, NC 27866	Yes
42-27	7337-29-1769	Connie H. Harrell and April Paige Banner	4745 US Highway 301, Pleasant Hill, NC 27866	Yes
42-27A	7337-19-8782	Francis K. Hobbs	1475 Doyles Lake Road, Emporia, VA 23847	Yes
42-37	7337-19-0679	Lois P. Allen	1218 Fountain Creek Road, Emporia, VA 23847	Yes
42-37B	7337-09-5344	Lois P. Allen	1218 Fountain Creek Road, Emporia, VA 23847	Yes
42-37F	7337-09-5535	Lois P. Allen	1218 Fountain Creek Road, Emporia, VA 23847	Yes
42-39	7337-18-9177	Gordon C. Williams, Jr.	1560 Grassy Pond Road, Emporia, VA 23847	Yes
42-41	7337-57-3290	Dane L. Little and Kellie B. Little	4171 Brink Road, Emporia, VA 23847	Yes
42-41F	7337-48-6589	Dane L. Little and Kellie B. Little	4171 Brink Road, Emporia, VA 23847	Yes
42-50	7337-65-7683	James S. Ferguson, Jr. and Sheila B. Ferguson	1570 Brink Road Emporia, VA 23847	Yes
42-51	7337-95-2080	James S. Ferguson, Jr. and Sheila B. Ferguson	1570 Brink Road Emporia, VA 23847	Yes
42-55	7338-50-7623	Willis Driver	5351 Broad Street Road, Louisa, VA 23093	Yes
42B-4-12	7337-69-4508	Haywood D. Jones and Martha E. Jones	1058 Pine Log Road, Skippers, VA 23879	Yes (Transmission Easement)

12.2 ADJACENT PROPERTY OWNERS

Table 12-2
Adjacent Property Parcel Owners and Addresses

Parcel Number	Adjacent Property Owners	Mailing Address	Situation
42-2-1	Bill Gene Tudor and Robin M. Tudor	7490 Brink Road, Emporia, VA 23847	Directly Borders
42-2-2	Richard Brian Tudor	7096 Brink Road, Emporia, VA 23847	Directly Borders
42-3-A	Susie K. Roberts and Charles Roberts, Jr.	1290 Pine Log Road, Skippers, VA 23879	Directly Borders
42-5-1	Jeffrey Bozard	1936 Pine Log Road, Skippers, VA 23879	Directly Borders
42-5-2	No county data available	No county data available	Directly Borders
42-5-3	Andrea S. Hines	1966 Pine Log Road, Skippers, VA 23879	Directly Borders
42-5-4	Della Palmer Goldsberry	P.O. Box 842, Emporia, VA 23847	Directly Borders
42-5-5	Ernest A. Royal and Kimberly Kaye Royal	1984 Pine Log Road, Skippers, VA 23879	Directly Borders
42-5-6	David L. Davis	P.O. Box 562, Emporia, VA 23847	Directly Borders
42-5-7	Charles B. Nunnally and Kimberly Nunnally	P.O. Box 388, Emporia, VA 23847	Directly Borders
42-5-8	Alonza Maurice Mason	2020 Pine Log Road, Skippers, VA 23879	Directly Borders
42-5-9	Dennis A Williams and Leslie E. Williams	2060 Pine Log Road, Skippers, VA 23879	Directly Borders
42-5-10	Anthony M. Pernell	2180 Pine Log Road, Skippers, VA 23879	Directly Borders
42-5-11	Tamara R. Jackson	2280 Pine Log Road, Skippers, VA 23879	Directly Borders
42-21	Lois Allen Woodruff	14447 Brink Road, Emporia, VA 23847	Directly Borders
42-22C	Brian Osborn	495 Pine Log Road, Skippers, VA 23879	Directly Borders
42-22D	Iluka Resources, Inc.	12472 St. John Church Road, Stony Creek, VA 23882	Directly Borders

Subject Property and Adjacent Property Owner List
May 18, 2018, Updated per County Comments on July 6, 2018

Parcel Number	Adjacent Property Owners	Mailing Address	Situation
42-23	J. Robinson Farm, LLC, C/O Jeanie R. Allen	618 Hilltop Lane, Emporia, VA 23847	Directly Borders
42-26A	Julie Webb	395 Cattail Creek Road, Skippers, VA 23879	Directly Borders
42-26B	Julie Webb	395 Cattail Creek Road, Skippers, VA 23879	Directly Borders
42-28	Kenneth M. Savi	2872 North Shore Drive, Suffolk, VA 23435	Directly Borders
42-31A	Samantha Powell, Tasha L. Powell, and Lesonti Powell	7830 Brink Road, Emporia, VA 23847	Directly Borders
42-33B	Dimple G. R. Bassett	P.O. Box 728, Chesterfield, VA 23832	Across Street
42-33C	Dimple G. R. Bassett	P.O. Box 728, Chesterfield, VA 23832	Directly Borders
42-37C	Cecil M. Phillips and Irene Phillips, C/O Kevin N. Phillips and Sherry C. Phillips	200 Second Street, Apt. 103, Emporia, VA 23847	Across Street
42-37D	Cecil M. Phillips and Irene Phillips, C/O Kevin N. Phillips and Sherry C. Phillips	200 Second Street, Apt. 103, Emporia, VA 23847	Across Street
42-37G	Brian K. Elmore	1750 Fountain Creek Road, Emporia, VA 23847	Across Street
42-38	Lois P. Allen and Jerry W. Allen, Sr.	1218 Fountain Creek Road, Emporia, VA 23847	Across Street
42-38A	Wilson Price Pearson	1526 Fountain Creek Road, Emporia, VA 23847	Across Street
42-38C	Timothy Price Pearson	1412 Hamilton Street, Roanoke Rapids, NC 27870	Across Street
42-39A	Gordon C. Williams, Jr.	1560 Grassy Pond Road, Emporia, VA 23847	Directly Borders
42-40	No county data available	No county data available	Directly Borders
42-41A	Alamance Jones, Jr.	1801 Pine Log Road, Skippers, VA 23879	Directly Borders
42-41B	Kathleen H. Gordon and James R. Gordon, Jr.	1163 Skippers Road, Emporia, VA 23847	Directly Borders
42-41D	No county data available	No county data available	Directly Borders
42-41C	Leslie W. Moseley and Debbie F Moseley	5246 Brink Road, Emporia, VA 23847	Across Street
42-41C1	Kirk W. Moseley and Erica P. Moseley	1969 Pine Log Road, Skippers, VA 23879	Across Street

MEHERRIN SOLAR PROJECT, GREENSVILLE COUNTY, VA

Subject Property and Adjacent Property Owner List
May 18, 2018, Updated per County Comments on July 6, 2018

Parcel Number	Adjacent Property Owners	Mailing Address	Situation
42-41E	Connie T. Jones and Alamance Jones, Jr.	1801 Pine Log Road, Skippers, VA 23879	Directly Borders
42-41E1	Ruby G. Jones Life Estate, Rubette Lane Jones, and Others	1863 Pine Log Road, Skippers, VA 23879	Across Street
42-41G	Linda L. Paulson	1735 Pine Log Road, Skippers, VA 23879	Directly Borders
42-42	Forest Hill Baptist Church	2103 Pine Log Road, Skippers, VA 23879	Across Street
42-42A	Forest Hill Baptist Church-Walter D. Rook, Sr. and Others, Trustees	2103 Pine Log Road, Skippers, VA 23879	Across Street
42-43	Ruby G. Jones Life Estate, Rubette Lane Jones, and Others	1863 Pine Log Road, Skippers, VA 23879	Across Street
42-44A	Eric N. Hicks	1171 Fountain Creek Road, Emporia, VA 23847	Directly Borders
42-44B	Eric N. Hicks	1171 Fountain Creek Road, Emporia, VA 23847	Across Street
42-45A	John Edward Hicks	1200 Fountain Creek Road, Emporia, VA 23847	Across Street
42-48	Alfred Smith, Pender L. Smith, Jr., and Alice S. Bivens, C/O Patricia Clary	405 Laurel Street, Emporia, VA 23847	Directly Borders
42-49	James S. Ferguson, Jr.	1091 Brink Road, Emporia, VA 23847	Directly Borders
42-50A	Harding A. Travis, Jr.	1810 Pine Log Road, Skippers, VA 23879	Directly Borders
42-50B	James E. Tomlinson, Jr.	54 Shearin Street, Emporia, VA 23847	Directly Borders
42-50C	Cherfonda R. Lee	1900 Pine Log Road, Skippers, VA 23879	Directly Borders
42-50D	James E. Tomlinson, Jr.	54 Shearin Street, Emporia, VA 23847	Directly Borders
42-52	Charles Randolph Garris	711 Diamond Grove Road, Skippers, VA 23879	Directly Borders
42-53	Linda W. Smith and Sandy M. Webb	409 Pinecrest Avenue, Roanoke Rapids, NC 27870	Directly Borders
42-53A	F. J. Daughtrey, Jr. and Judy Arlene Wrenn	1500 Pine Log Road, Skippers, VA 23879	Across Street
42-53A1	A. G. Gordon Estate	Pine Log Road,	Across Street

Subject Property and Adjacent Property Owner List
May 18, 2018, Updated per County Comments on July 6, 2018

Parcel Number	Adjacent Property Owners	Mailing Address	Situation
		Skippers, VA 23879	
42-54A	No county data available	No county data available	Across Street
42-54A1	James Rodney Driver and Bonnie G. Driver	750 Pine Log Road, Skippers VA 23879	Across Street
42-54A2	Donald Mitchell Driver	18 Dalton Court, Roanoke Rapids, NC 27870	Across Street
42-54B	No county data available	No county data available	Directly Borders
42-54I	David J. Creath and Glenda D. Creath	914 Pine Log Road, Skippers, VA 23879	Directly Borders
42-55A	David Michael Allen and Kathy Denise Driver Allen	847 Pine Log Road, Skippers, VA 23879	Directly Borders
42-55B	David Michael Allen and Kathy Denise Driver	847 Pine Log Road, Skippers, VA 23879	Across from Adjacent Parcel
42-55C	David Michael Allen and Kathy Denise Driver	847 Pine Log Road, Skippers, VA 23879	Across from Adjacent Parcel
42-55D	David Michael Allen and Kathy Denise Driver	847 Pine Log Road, Skippers, VA 23879	Directly Borders
42-55E	David Michael Allen and Kathy Denise Driver	847 Pine Log Road, Skippers, VA 23879	Directly Borders
42-55F	Kathy Denise Driver Allen	847 Pine Log Road, Skippers, VA 23879	Directly Borders
42-56	No county data available	No county data available	Across Street
42-57	Edwin P. Powell, Jr.	600 Pine Log Road, Skippers, VA 23879	Across Street
42-57A	Robin P. Powell and Edwin P. Powell, Jr.	600 Pine Log Road, Skippers, VA 23879	Across Street
42B-1-A	Florence Ashley Bernard, C/O Janice Randof	858 Pine Log Road, Skippers, VA 23879	Across Street
42B-1-B	Florence Ashley Bernard, C/O Janice Randof	858 Pine Log Road, Skippers, VA 23879	Across Street
42B-2-5	David J. Creath and Glenda D. Creath	914 Pine Log Road, Skippers, VA 23879	Across Street
42B-2-6	David J. Creath and Glenda D. Creath	914 Pine Log Road, Skippers, VA 23879	Across Street
42B-3-7	David J. Creath and Glenda D. Creath	914 Pine Log Road, Skippers, VA 23879	Across Street
42B-3-8	Lyman Allen Little and Kathie Whitehead Little	998 Pine Log Road, Skippers, VA 23879	Across Street

MEHERRIN SOLAR PROJECT, GREENSVILLE COUNTY, VA

Subject Property and Adjacent Property Owner List
May 18, 2018, Updated per County Comments on July 6, 2018

Parcel Number	Adjacent Property Owners	Mailing Address	Situation
42B-3-9	Lyman Allen Little and Kathie W. Little	998 Pine Log Road, Skippers, VA 23879	Across Street
42B-3-10	Haywood D. Jones and Martha E. Jones	1058 Pine Log Road, Skippers, VA 23879	Across Street
42B-4-11	James Robert Driver	1094 Pine Log Road, Skippers, VA 23879	Directly Borders
42B-4-11A	James Robert Driver	1094 Pine Log Road, Skippers, VA 23879	Directly Borders
43-43	Albert E. Young and Rosa Y. Vincent C/O Rose Reeves Vincent	3576 Hayes Street NE, Apt. 102, Washington, DC 20019	Directly Borders
43-44	Henry Stephen Allen and Joseph Michael Allen	618 Hilltop Lane, Skippers, VA 23879	Directly Borders
43-58	Henry Stephen Allen and Joseph Michael Allen	618 Hilltop Lane, Skippers, VA 23879	Directly Borders
53-55	Massie Branch Farm LLC	358 Hilltop Lane, Skippers, VA 23879	Directly Borders
54-1	Massie Branch Farm LLC	358 Hilltop Lane, Skippers, VA 23879	Directly Borders
54-2	Massie Branch Farm LLC	358 Hilltop Lane, Skippers, VA 23879	Directly Borders

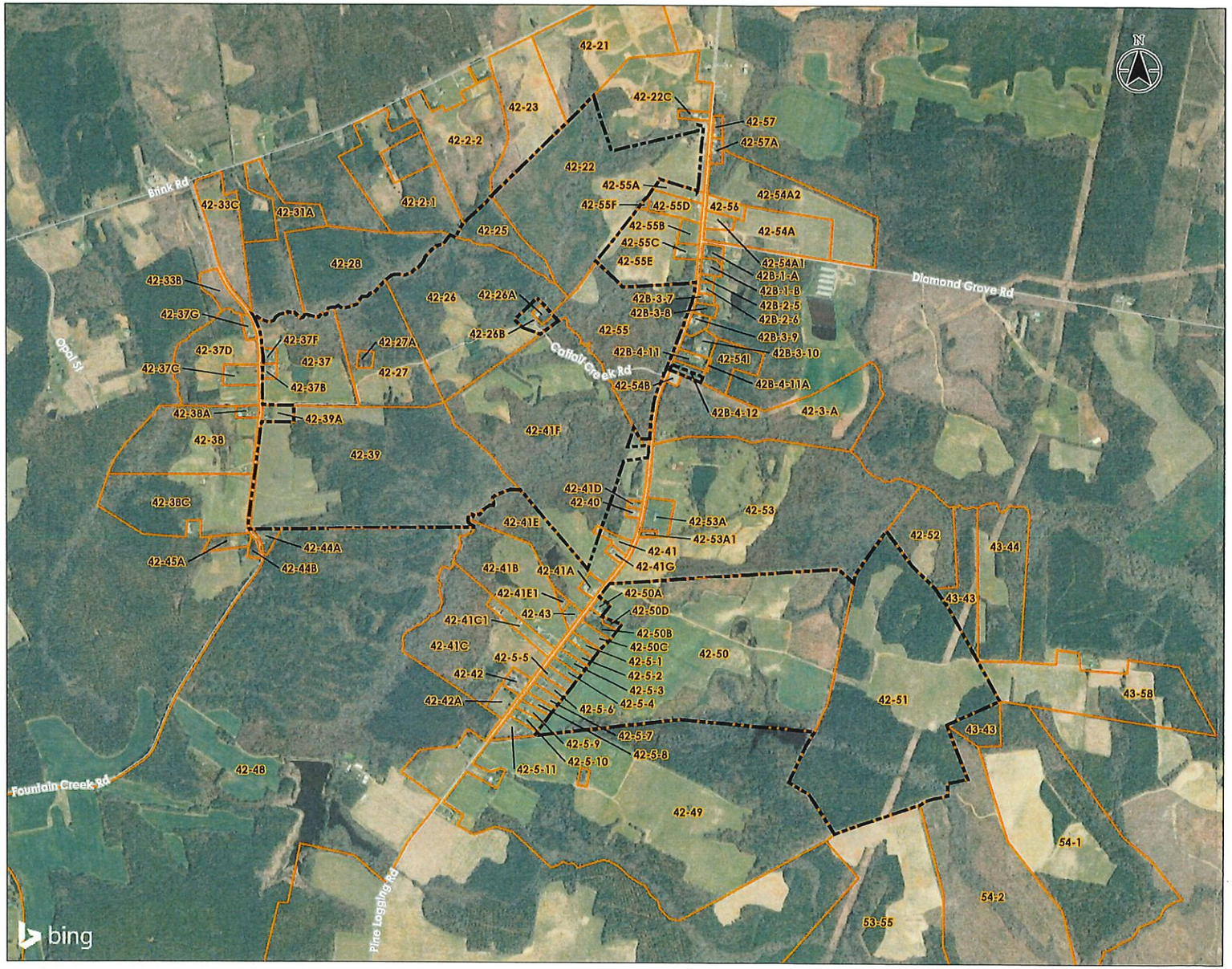


Figure No.
12-1

Title
Parcel Map

Client/Project
Meherrin Solar LLC
Meherrin Solar Site

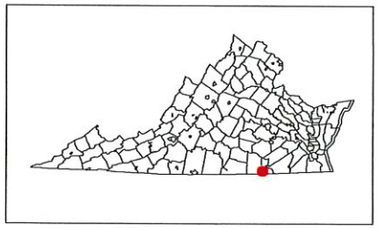
Map Date: 2018-05-18

Project Location
Greensville County, Virginia

203400930
Prepared by JMH on 2018-04-02
Technical Review by ECL on 2018-04-03
Independent Review by JLO on 2018-04-06

0 1,400 2,800 Feet
1:16,800 (At original document size of 11x17)

Project Limits
Parcel Key / Boundary



Notes
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Project limits provided by Brookfield Renewable
3. Parcel data provided by Greensville County GIS, 2016
4. Orthoimagery © Bing Maps
5. Microsoft product screen shot(s) reprinted with permission from Microsoft Corporation

Stantec

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APPENDIX A: LAND USE AGREEMENTS

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SOLAR ENERGY OPTION AGREEMENT

THIS SOLAR ENERGY OPTION AGREEMENT (the "Option Agreement"), is effective as of the Effective Date (hereinafter defined) by and between Landowner (hereinafter defined) and Company (hereinafter defined). Landowner and Company may hereafter be referred to as, together, the "Parties" and each, a "Party".

RECITALS

A. Landowner is the owner of the Property (hereinafter defined).

B. Landowner desires to grant and convey to Company an exclusive option (the "Option") to acquire the Solar Rights (hereinafter defined) on the Property to be determined in accordance with the further provisions hereof.

C. Landowner desires to maintain the right to choose between a lease or a sale of the property prior to the Company's exercise of the Option.

AGREEMENT

IN CONSIDERATION of the foregoing and other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the Parties hereto agree as follows:

1. DEFINITIONS. The following terms have the definitions ascribed to such terms in the table below:

Term	Definition
"EFFECTIVE DATE"	August 10, 2016
"LANDOWNER" (and address)	Donald M. and Linda H. Driver 18 Dalton Court; Roanoke Rapids, NC 27870 Michael Harp Jr. and Sheila D. Harp 205 Beechwood Drive; Roanoke Rapids, NC 27870
"COMPANY" (and address)	SolUnesco, LLC Whose address for notice purposes hereunder is: Contracts Administration 1900 Campus Commons Drive, Suite 100 Reston, VA 20191 phone: (703) 300-8971 email: Info@solunesco.com

Term	Definition
"OPTION PRICE"	The sum of (i)[redacted] for the first year of the Option Term, being due no later than thirty (30) days following the Effective Date, plus (ii)[redacted] for the second year of the Option Term, being due no later than the first anniversary of the Option Term, plus (iii)[redacted] for the third year of the Option Term, being due no later than the second anniversary of the Option Term, plus (iv) [redacted] for the fourth year of the Option Term, being due no later than the third anniversary of the Option Term, plus (v)[redacted] for the fifth year of the Option Term, being due no later than the fourth anniversary of the Option Term. The Option Price shall be paid to the Landowners in proportion with their ownership share. [redacted]
"OPTION TERM"	The period commencing on the Effective Date and terminating on the fifth (5th) anniversary of the Effective Date. If Company requests an extension, the Parties shall negotiate in good faith for such extension if Company can demonstrate it has diligently pursued and incurred significant costs related to conducting its site specific due diligence for construction of the Solar Facility; applying for and obtaining necessary local land use permits and related approvals; securing project financing; or procuring the Solar Facility Equipment.
"PROPERTY"	The real property located in Greensville County, VA described in "Exhibit C-1" attached hereto and made a part hereof for all purposes.
"SOLAR RIGHTS"	The right to capture the unobstructed flow of all radiant energy emitted from the sun upon, over and across the Leased Premises or any portion of the Leased Premises for electric power, heat and/or steam generation purposes, including the right to construct, operate and maintain solar energy conversion systems, including, without exclusion, solar photovoltaic panels (including concentrating solar photovoltaic equipment), batteries and/or other energy storage devices, solar resource measurement equipment, support structures, foundations, pads, footings, fencing, electrical inverters and transformers, meters, switches, breakers, fixtures, equipment storage, electric wiring, distribution and transmission lines, access roads, interconnection facilities and related structures and facilities and equipment, together with certain easement and/or leasehold rights for access, utilities and other appurtenant rights to the foregoing.

2. Grant of Option. Landowner grants Company an exclusive, irrevocable Option to acquire the Solar Rights. Said Option shall be in effect during the Option Term for so long as the Option Price is paid to Landowner by Company as set forth hereinabove. During the life of the Option, the Landowner maintains the right should Company exercise its option to either 1) lease the property to the Company, or 2) sell the property to the Company.

3. Termination of Option. Company may, at its sole option, terminate this Option Agreement at any time. Any payments made to Landowner before this Option Agreement is terminated shall be Landowner's property and need not be refunded in whole or in part. Landowner may terminate this Option Agreement if Company fails to make any payment required by this Option Agreement and Landowner has provided written notice of such failure to Company and provided thirty (30) days to cure such failure.

4. Exercise of Option. Company may exercise the Option by giving written notice of such exercise to Landowner at any time during the Option Term and delivering to Landowner (Notice of Exercise). At time of Notice of Exercise, Landowner has the right to select to either lease or sell the Property and shall notify the company of Landowners choice within thirty calendar days from receiving the Notice of Exercise subject to the provisions below:

    a. If Company has provided Notice of Exercise and Landowner selects to lease the property, the Company shall deliver to Landowner a Lease Agreement (herein so called) in a form prepared by Company containing the terms set forth on "Exhibit A" attached hereto and made a part hereof and such other matters as are customary and reasonable in solar energy lease and easement agreements. To the extent Landowner has any comments or objections to the Lease Agreement, Landowner shall provide such comments or objections to Company no later than thirty (30) days following receipt of the Lease Agreement, and the Parties shall negotiate in good faith to resolve such comments or objections no later than thirty (30) days following exercise of the Option; provided, however, that Landowner shall have no right to object to the Lease Agreement to the extent the Lease Agreement conforms to the terms of this Option Agreement and contains such other reasonable and customary terms as are typically found in lease and easement agreements in the solar industry. Landowner shall execute and deliver to Company the Lease Agreement promptly upon resolution of the form of same.

    OR

    b. If Company has provided Notice of Exercise and Landowner selects to sell the property, the Company shall deliver to Landowner a Purchase Agreement (herein so called) in a form prepared by Company containing the terms set forth on "Exhibit B" attached hereto and made a part hereof and such other matters as are customary and reasonable in real property purchase and sale agreements. The Option notice shall designate the acreage of the Property that Company wishes to purchase if Company wishes to purchase less than all of the Property. To the extent Landowner has any comments or objections to the Purchase Agreement, Landowner shall provide such comments or objections to Company no later than thirty (30) days following receipt of the Purchase Agreement, and the Parties shall negotiate in good faith to resolve such comments or objections no later than thirty (30) days following exercise of the Option; provided, however, that Landowner shall have no right to object to the Purchase Agreement to the extent the Purchase Agreement conforms to the terms of this Option Agreement and contains such other reasonable and customary terms as are typically found in real

estate purchase and sale agreements promulgated by industry groups in the area where the Property is located. Landowner shall execute and deliver to Company the Purchase Agreement promptly upon resolution of the form of same.

5. **Crop Damage**: The Parties anticipate and acknowledge that Landowner may suffer damage to crops, grass, fences, and other property or improvements on the Property during Company's construction, installation, decommissioning, relocation, and maintenance of Solar Facilities. Company shall pay Landowner for any such losses or damage to the extent such damages are outside the Leased Premises and for the removal of crops inside the Lease Premises as provided below. Except for such losses and damage, Company shall not be responsible for any losses of income, rent, business opportunities, profits or other losses arising out of Landowner's inability to grow crops on or otherwise use the Property. In the event that the commencement of construction begins prior to harvest resulting in Landowner's inability to harvest crops, Company will reimburse Landowner or tenant farmer for the greater of i) all documented costs of preparing the ground and planting, or ii) a sum equal to the product of the number of acres damaged within the Leased Premises, multiplied by the per-acre average market price for such crop in Greensville County, Virginia, as reported by a mutually agreeable reference for pricing (e.g, $/acre from a local grainer for the relevant crop according to the local extension service), subject to a pro rata adjustment for the portion of the growing period completed (e.g., for a 110 day growing period and Company occupancy occurs on the 55th day, the percentage is 50%). Landowner and Company agree to each use reasonable efforts to minimize crop damage.

6. **Authority.** Landowner represents and warrants to Company that Landowner is the sole owner of the Property and has the unrestricted right and authority to sign this Option Agreement; to grant Company the rights granted in this Option Agreement; and, to enter into the Lease or Sale as case may be (hereinafter defined) if Company exercises the Option. When signed by the parties, this Option Agreement constitutes a valid and binding agreement enforceable against the Parties in accordance with its terms.

7. **Company's Due Diligence.** During the Option Term, Company or its representatives at Company's sole cost shall have the right of access to the Property for the purpose of installing equipment, making surveys, physical inspections and investigations, including but not limited to solar and environmental studies considered necessary by Company in connection with its proposed use of the Property under the Lease Agreement. Company will provide Landowner with reasonable prior notification of any entry on the Property. Company shall repair or reimburse Landowner for the cost of, any damages to property caused by its entry upon the Property.

8. **Successors and Assigns.** This Option Agreement shall run with the land. Either party may without the consent of the other assign its interest in this Option Agreement. Any assignment shall be subject to the terms and requirements of this Option Agreement. This Option Agreement shall inure to the benefit of and be binding upon the parties, their heirs, successors, and assigns.

9. **Notices.** All notices or other communications required or permitted by this Option Agreement, shall be in writing and shall be deemed given or made when personally delivered or, in lieu of such personal service, five (5) days after deposit in the United States mail, first class, postage prepaid,

certified, or one (1) business day after dispatch by Federal Express or other overnight delivery service of national scope, addressed as set forth in the table set forth hereinabove.

10. **Further Assurances.** Each party agrees to cooperate with the other party and to execute any additional documents reasonably necessary or proper to carry out the provisions and spirit of this Agreement. Without limitation of the foregoing, Landowner agrees to execute and deliver to Company a short form or memorandum of this Option Agreement in a recordable form, which document may be recorded by Company in the real property records of the county in which the Property is located.

SIGNATURES TO FOLLOW ON NEXT PAGE

IN WITNESS WHEREOF, the Parties have executed this Option Agreement as the Effective Date.

Landowners:

By: _____
Donald M. Driver

By: _____
Linda H. Driver

By: _____
Michael Harp Jr.

By: _____
Sheila D. Harp

Company:

SolUnesco, LLC

a Virginia Limited Liability Company

By: _____
Name: Francis Hodsoll
Title: Chief Executive Officer

EXHIBIT A

SOLAR LEASE TERM SHEET

The Lease shall grant to Company the Solar Rights and shall contain provisions substantially covering the following terms and provisions:

A. **LEASED PROPERTY:** The real property located in Greensville County, Virginia, generally depicted on Exhibit C. The final acreage leased shall be determined by the Company's certified property survey conducted prior to the effective date. For informational purposes only, based on the Greensville County, Virginia Geographic Information System and our knowledge of the sale to Iluka we estimate the property to be eighty-six and 46/100 (86.46) acres.

B. **TERM:** The Lease will commence on the effective date which shall occur prior to the groundbreaking for construction activities and ends on the twenty-fifth (25th) anniversary of the "Commercial Operations Date" (the Initial Term). The Commercial Operations Date means the date which all testing and commissioning has been completed and is the initiation date to which the seller can start producing electricity for sale. Company shall have the right to extend the Commercial Operational term an additional ten (10) years.

C. **RENTAL:** Rental during the Initial Term of the Lease will be [redacted] per acre per year of the Leased Premises under the Lease, [redacted] Rental during the ten-year extension term, if exercised, shall be reasonably agreed upon by the Parties in the final year of the initial term. The Rental payments shall be paid to the Landowners in proportion to their ownership share. [redacted]

D. **TAXES:** Landowner shall pay, when due, all real property taxes and assessments levied against Landowner's Property and all personal property taxes and assessments levied against any property and improvements owned by Landowner and located on Landowner's Property. Company shall pay all personal property taxes and assessments levied against the Solar Facilities when due. If Landowner's Property experiences any increase in the amount of real property taxes assessed as a result of the installation of the Solar Facilities on Landowner's Property, including any reclassification of Landowner's Property, Company will be responsible for paying such increase.

E. **Right of Ways:** Company will provide Landowners two Rights of Way. One, Company will provide the Landowners a Right of Way to allow for access to a potential future cellular site as identified by their agreement providing a right to locate a future cellular tower. Two, Company will provide Landowners a Right of Way to access land not being utilized for the Solar Rights (the unleased land).

F. **REMOVAL AND RESTORATION:** Within twelve (12) months after the end of the Lease, Company will remove all improvements to a depth of thirty-six (36) inches. During the term of the lease, Company shall post or arrange for the posting of security funds in a manner and amount sufficient to ensure decommissioning of the solar facility and removal of the improvements from the Leased Property consistent with standard industry practices. Upon termination of the Lease for any reason,

Company shall promptly thereafter execute and record a release of all of Company's right, title and interest in the Property.

G. **INDEMNITY AND INSURANCE:** Prior to the commencement of construction, Company will indemnify Landowner for injuries and claims for direct damage to the extent caused by Company's exercise of its rights under the Lease backed by general liability insurance with a combined single limit of [redacted] At the commencement of the construction, the amount will increase to [redacted] Certificates of insurance policies, showing such coverage, shall be delivered to Landowner annually upon request showing.

H. **COOPERATION:** Landowner shall reasonably cooperate in obtaining permits, signing documents requested by Company and its lenders, obtaining signatures of Landowner's tenants and lenders on non-disturbance agreements, and in all other matters relating to Company's proposed activities on the Property.

I. **ASSIGNMENT:** Company has the right to assign, sublease, transfer or convey all or part of its interests in this Lease without Landowner's consent. Company shall provide written notice to Landowner of any such assignment, sublease, transfer, or conveyance. Landowner may assign this Lease to any party in connection with any Transfer of the Leased Property by Landowner; provided, however, that any such Transfer shall be subject to this Lease.

J. **OTHER TERMS AND PROVISIONS:** The Lease shall contain other customary ground lease terms and provisions, including but not limited to provisions relating to non-interference, non-disturbance, quiet enjoyment, condemnation, waiver of any Landlord liens on Company's personal property, lender protection provisions (including but not limited to the right of any Company lender to receive notices of default and additional time to cure defaults and such other customary lender protection provisions), recording of memoranda, delivery of estoppels, further assurances and other reasonable and customary provisions.

EXHIBIT B

SOLAR PURCHASE TERM SHEET

The Purchase Agreement shall contain provisions covering substantially the following terms and provisions:

A. **PURCHASE PRICE:** The purchase price for the property shall be [redacted] The Purchase Price payment shall be paid to the Landowners in proportion to their ownership share. [redacted]

B. **EARNEST MONEY:** Company shall deposit with a title company designated by Company (the "Title Company") Earnest Money (herein so called) in the amount of [redacted] no later than three business days following the effective date of the Purchase Agreement. The Earnest Money shall be nonrefundable to Company in any event other than a default by Landowner or failure of any closing condition and shall be credited against the Purchase Price at closing if closing occurs. If Company fails to perform its obligations under the Purchase Agreement at closing, Landowner shall be entitled to retain the Earnest Money (and any Option Price paid) as liquidated damages for Company's default, all other remedies being waived by Landowner.

C. **CLOSING:** Closing shall occur no later than thirty (30) days following the effective date of the Purchase Agreement. At closing, Company shall pay the purchase price, and Landowner shall execute and deliver a general warranty deed and such other documents as are required by the Title Company to issue a title insurance policy to Company covering the Property, which title insurance policy shall be at Company's sole cost and expense. The Parties shall execute a settlement statement prepared by the Title Company. Real estate taxes shall be prorated as of the date of closing.

D. **Right of Way:** Company will provide the Landowners a Right of Way to allow for access to a potential future cellular site as identified by their agreement providing a right to locate a future cellular tower.

E. **TITLE AND SURVEY:** Company shall have the right to perform a survey of the Property and to have the Title Company issue a commitment for title insurance covering the Property and to make any objections to title and survey matters in Company's sole discretion. Landowner shall have no obligation to cure any such objections other than those Landowner agrees in writing to cure; provided, however, that Landowner shall cause any liens or judgments affecting the Property to be released at or prior to closing. It shall be a condition of Company's obligation to close that Company be satisfied with the condition of title in Company's sole discretion.

F. **REPRESENTATIONS AND WARRANTIES.** The Purchase Agreement shall contain such representations and warranties as are customary in real estate purchase and sale agreements and in any event shall

contain a warranty of title by Landowner and representations of authority by both Company and Landowner.

G. **ASSIGNMENT**: Company shall have the right to assign its interests in the Purchase Agreement without Landowner's consent. Company shall provide written notice to Landowner of any such assignment, sublease, transfer, or conveyance.

PIN: 7338-52-3417

Exhibit C-1

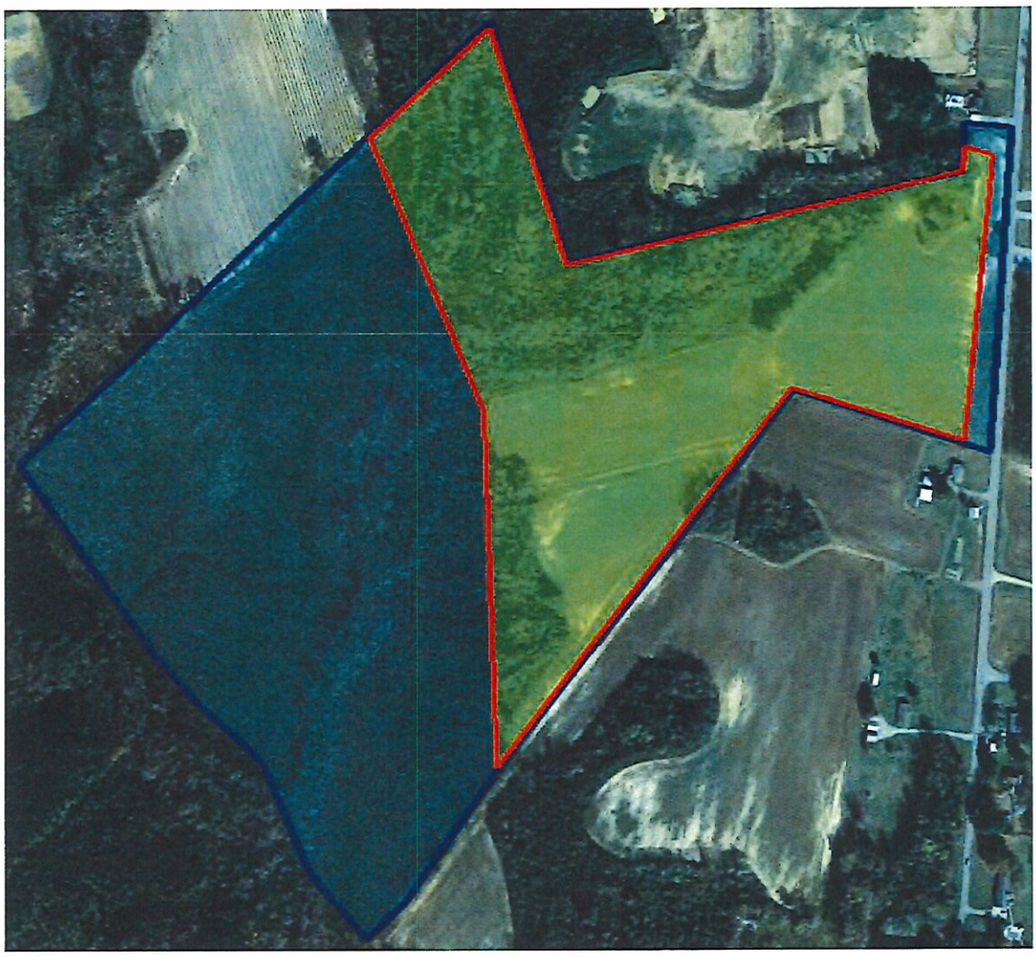
That certain property known as: Greensville County parcel 42-22 located on Pine Log Rd.

For informational purposes only, based on the Greensville County, Virginia Geographic Information System and our knowledge of the sale to Iluka we estimate the property to be eighty-six and 46/100 (86.46) acres

EXHIBIT C-2

Preliminary Sketch of Solar Array

SolUnesco provides the following initial estimate for informational purposes. The final solar design will be based on the results of site analyses and permitting studies. SolUnesco has estimated that the property identified in Exhibit B-1 could host up to thirty-eight and 40/100s acres (38.4) acres of solar power generation generally identified by the red boundary in the map below:



Francis Hodsoll, Agent for Meherrin Solar LLC
Meherrin Solar LLC
75 State Street
Suite 2701
Boston, MA 02109

Re: Greensville County Parcel, Tax Map 42 and Lot 25, further identified by the county's GPIN number of 7338-81-8404

Dear Ryan Harrell:

This is further to our discussions and our agreement to negotiate and enter into a binding option to purchase agreement ("Option Agreement") for the Property.

The Option Agreement will include the following terms:

1. Landowner – Ryan Harrell
2. Buyer – Mererrin Solar LLC
3. Property – as above, vacant property. For informational purposes only, landowner Deed states the Property to be twelve and 0/100 (14.0) acres.
4. Term of Option – three (3) years.
5. Amount paid as deposit on the signing of the Option - [redacted]
6. Purchase Price for Property - [redacted] All option payments previously paid at time of purchase shall be credited towards this purchase price.
7. Property will be free and clear of all liens.

We agree to use our commercially reasonable efforts to finalize and sign the Option Agreement on or before May 31, 2017, failing which neither of us will be liable to the other and this letter will be of no further force or effect.

If the foregoing is satisfactory, please sign where indicated below.

Thanks very much.

The foregoing is agreed.

Ryan Harrell (May 9, 2017)	May 9, 2017		May 9, 2017
Landowner, Ryan Harrell	Date	Francis Hodsoll, CEO, SolUnesco & Agent for Meherrin Solar	Date

REAL PROPERTY PURCHASE OPTION AGREEMENT

THIS REAL PROPERTY PURCHASE OPTION AGREEMENT (the "Option Agreement"), is effective as of the Effective Date (hereinafter defined) by and between Landowner (hereinafter defined) and Company (hereinafter defined). Landowner and Company may hereafter be referred to as, together, the "Parties" and each, a "Party".

RECITALS

A. Landowner is the owner of the Property (hereinafter defined).

B. Landowner desires to grant and convey to Company an exclusive option (the "Option") to purchase the Property (hereinafter defined).

AGREEMENT

IN CONSIDERATION of the foregoing and other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the Parties hereto agree as follows:

1. **Definitions**. The following terms have the definitions ascribed to such terms in the table below:

Term	Definition
"Effective Date"	December 5, 2016
"Landowner" (and address)	Connie Harrell 4745 US Highway 301, Pleasant Hill, NC 27866
"Company" (and address)	Solunesco, LLC Whose address for notice purposes hereunder is: Contracts Administration 1900 Campus Commons Drive, Suite 100 Reston, VA 20191 phone: (703) 300-8971 email: Info@solunesco.com
"Option Price"	The sum of (i) [redacted] for the first year of the Option Term (hereinafter defined), being due no later than thirty (30) days following the Effective Date, plus (ii) [redacted] for the second year of the Option Term, being due no later than the first anniversary of the Effective Date, plus (iii) [redacted] for the third year of the Option Term, being due no later than the second anniversary of the Effective Date, plus (iv) [redacted] for months thirty seven (37) through forty two (42) of the Option Term, being due no later than the third anniversary of the Effective Date.

Term	Definition
"Option Term"	The period commencing on the Effective Date and terminating at the end of the forty-second (42) month following the Effective Date. If Company requests an extension, the Parties shall negotiate in good faith for such extension if Company can reasonably demonstrate it has diligently pursued and incurred significant costs related to conducting its site specific due diligence for construction of the Solar Facility; applying for and obtaining necessary local land use permits and related approvals; securing project financing; or procuring the applicable solar facility equipment.
"Property"	That certain lot or tract of land located in Greensville County, VA described in "**Exhibit B**" attached hereto and made a part hereof for all purposes. The Property shall be determined by licensed survey.

2. **Option Terms & Payment**

    a. Landowner hereby grants Company an exclusive, irrevocable Option to purchase the Property.

    b. The Option shall be in effect during the Option Term, subject to Landowner's right to terminate this Option Agreement as set forth in Section 3.

    c. As consideration for the Option Term, Company shall pay to Landowner the Option Price.

3. **Termination of Option**. Company may, at its sole option, terminate this Option Agreement at any time, upon written notice to Landowner. Any payments made to Landowner before this Option Agreement is terminated shall be Landowner's property and need not be refunded in whole or in part. Landowner may terminate this Option Agreement by written notice to Company if Company fails to make any payment required by this Option Agreement and Landowner has provided written notice of such failure to Company and provided thirty (30) days to cure such failure.

4. **Exercise of Option**. Company may exercise the Option by (i) providing written notice of such exercise to Landowner at any time during the Option Term and (ii) delivering to Landowner a Purchase Agreement (herein so called) in a form prepared by Company containing the terms set forth on **"Exhibit A"** attached hereto and made a part hereof and such other matters as are customary and reasonable in real property purchase and sale agreements. Company shall provide a minimum of sixty (60) days' notice prior to the exercise of the Option. To the extent Landowner has any comments or objections to the Purchase Agreement, Landowner shall provide such comments or objections to Company no later than thirty (30) days following receipt of the Purchase Agreement, and the Parties shall negotiate in good faith to resolve such comments or objections no later than thirty (30) days following exercise of the Option; provided, however, that Landowner shall have no right to object to the Purchase Agreement to the extent the Purchase Agreement conforms to the terms of this Option Agreement and contains such other reasonable and

customary terms as are typically found in real estate purchase and sale agreements promulgated by industry groups in the area where the Property is located. Landowner shall execute and deliver to Company the Purchase Agreement promptly upon resolution of the form of same.

5. **Crop Damage**. The Parties anticipate and acknowledge that Landowner may suffer damage to crops, grass, fences, and other property or improvements on the Property during Company's construction, installation, decommissioning, relocation, and maintenance of Solar Facilities. Company shall pay Landowner for any such losses or damage to the extent such damages are outside the Leased Premises and for the removal of crops inside the Lease Premises as provided below. Except for such losses and damage, Company shall not be responsible for any losses of income, rent, business opportunities, profits or other losses arising out of Landowner's inability to grow crops on or otherwise use the Property. In the event that the commencement of construction begins prior to harvest resulting in Landowner's inability to harvest crops, Company will reimburse Landowner or tenant farmer for the greater of i) all documented costs of preparing the ground and planting, or ii) a sum equal to the product of the number of acres damaged within the Leased Premises, multiplied by the per-acre average market price for such crop in Greensville County, VA as reported by a mutually agreeable reference for pricing (e.g, $/acre from a local grainer for the relevant crop according to the local extension service). Landowner and Company agree to each use reasonable efforts to minimize crop damage.

6. **Net Timbering Value**. The Parties agree that i) the Company shall conduct timbering operations only on land purchased by the Company; and ii) the Company shall have the sole right, power and authority to conduct any timbering operations and all associated stump removal, chipping and removal of all brush and laps created by said timbering operations. The Company shall pay to the Landowner the Net Timbering Value prior to the Commercial Operations Date. [The Commercial Operations Date means the date which all testing and commissioning has been completed and is the initiation date to which the seller can start producing electricity for sale.] The Net Timbering Value shall mean the value received from the timber less all costs for stump removal, chipping and removal of all brush and laps created by said timbering operations. The Company will not seek payment from Landowner if the Net Timbering Value is negative. The Company shall provide to Landowner all documentation associated with the timbering, stump removal, chipping and removal of all brush and laps including but not limited to contracts, sales receipts, invoices, and bank drafts.

7. **Landowner Disturbances**. Except for the activities envisioned in Sections 5 and 6, Landowner shall not disturb the Property in any form during the Option Term without the express written consent of the Company.

8. **Authority**. Landowner represents and warrants to Company that Landowner is the sole owner of the Property and has the unrestricted right and authority to sign this Option Agreement; to grant Company the rights granted in this Option Agreement; and, to enter into the Purchase Agreement if Company exercises the Option. When signed by the Parties, this Option Agreement constitutes a valid and binding agreement enforceable against the Parties in accordance with its terms.

9. **Company's Due Diligence**. During the Option Term, Company or its representatives at Company's sole cost shall have the right of access to the Property for the purpose of installing equipment, making surveys, physical inspections and investigations, including but not limited to solar and environmental studies considered necessary by Company in connection with its proposed use of the Property under this Option Agreement and/or the Lease Agreement. Company will provide Landowner with reasonable prior notification of any entry on the Property. Company shall repair or reimburse Landowner for the cost of, any damages to the Property caused by its entry upon the Property. The Landowner shall cooperate with the Company and its representatives to prevent competing usage of the Property by third parties (e.g., hunting) while such due diligence is being performed pursuant to this Section 9.

10. **Taxes and Penalties**. Landowner will be held solely liable for any federal, state or local fines or penalties associated with disturbing of the Property illegally during the Option Term of this Option Agreement, except to the extent directly caused by the Company. Landowner shall also be responsible for all real estate taxes assessed against the Property.

11. **Exclusivity of Option**. Landowner shall not enter into a purchase or lease agreement with any other Party prior to the expiration or termination of this Option Agreement.

12. **Waiver of Consequential Damages**. IN NO EVENT SHALL THE COMPANY BE LIABLE TO LANDOWNER FOR ANY SPECIAL, CONSEQUENTIAL, INCIDENTAL, OR INDIRECT DAMAGES OR LOST PROFITS, HOWEVER CAUSED, ON ANY THEORY OF LIABILITY EVEN IF ADVISED OF SUCH A POSSIBILITY.

13. **Successors and Assigns**. This Option Agreement shall run with the land. Either Party may without the consent of the other assign its interest in this Option Agreement. Any assignment shall be subject to the terms and requirements of this Option Agreement. This Option Agreement shall inure to the benefit of and be binding upon the parties, their heirs, successors and assigns.

14. **Notices**. All notices or other communications required or permitted by this Option Agreement, shall be in writing and shall be deemed given or made when personally delivered or, in lieu of such personal service, five (5) days after deposit in the United States mail, first class, postage prepaid, certified, or one (1) business day after dispatch by Federal Express or other overnight delivery service of national scope, addressed as set forth in the table set forth hereinabove.

15. **Further Assurances.** Each Party agrees to cooperate with the other Party and to execute any additional documents reasonably necessary or proper to carry out the provisions and spirit of this Option Agreement. Without limitation of the foregoing, Landowner agrees, upon the written request of the Company, to execute and deliver to the Company a short form or memorandum of this Option Agreement in a recordable form, which document may be recorded by the Company in the real property records of the locality in which the Property is located.

16. **Purchase Agreement Controlling**. In the event a conflict arises between the terms and conditions of the Purchase Agreement and this Option Agreement, the Purchase Agreement shall control.

17. **Counterparts**. This Option Agreement may be executed in any number of counterparts, each of which shall be an original and all, when taken together, shall constitute one and the same document. Transmission by facsimile or electronic transmission by pdf of an executed counterpart of this Option Agreement shall be deemed to constitute due and sufficient delivery of such counterpart.

18. **Entire Agreement; Modification**. This document sets forth the entire agreement and understanding between the Parties relating to the subject matter herein and supersedes all prior discussions between the Parties. No modification of or amendment to this Option Agreement, nor any waiver of any rights under this Option Agreement, will be effective unless in writing signed by the Party to be charged.

19. **Waiver**. If either Party fails to require the other to perform any term of this Option Agreement, that failure does not prevent the Party from later enforcing that term. If either Party waives the other Party's breach of a term, that waiver is not treated as waiving a later breach of that term.

SIGNATURES TO FOLLOW ON NEXT PAGE

IN WITNESS WHEREOF, the Parties have executed this Option Agreement as the Effective Date.

Landowner:

Connie Harrell

By: Connie D. Harrell

Name:

Company:

SolUnesco, LLC

a Virginia Limited Liability Company

By: Dec 5, 2016

Name: Francis Hodsoll

Title: Chief Executive Officer

EXHIBIT A

SOLAR PURCHASE TERM SHEET

The Purchase Agreement shall contain provisions covering substantially the following terms and provisions:

A. **PURCHASE PRICE**: The purchase price shall be [redacted] for the Property (as defined herein). The Property shall be determined by licensed survey.

B. **EARNEST MONEY**: Company shall deposit with a title company designated by Company (the "Title Company") Earnest Money (herein so called) in the amount of [redacted] no later than three business days following the effective date of the Purchase Agreement. The Earnest Money shall be nonrefundable to Company in any event other than a default by Landowner or failure of any closing condition and shall be credited against the Purchase Price at closing if closing occurs. If Company fails to perform its obligations under the Purchase Agreement at closing, Landowner shall be entitled to retain the Earnest Money (and any Option Price paid) as liquidated damages for Company's default, all other remedies being waived by Landowner.

C. **CLOSING**: Closing shall occur no later than thirty (30) days following the effective date of the Purchase Agreement. At closing, Company shall pay the purchase price, and Landowner shall execute and deliver a general warranty deed and such other documents as are required by the Title Company to issue a title insurance policy to Company covering the Property, which title insurance policy shall be at Company's sole cost and expense. The Parties shall execute a settlement statement prepared by the Title Company. Real estate taxes shall be prorated as of the date of closing.

D. **TITLE AND SURVEY**: Company shall have the right to perform a survey of the Property and to have the Title Company issue a commitment for title insurance covering the Property and to make any objections to title and survey matters in Company's sole discretion. Landowner shall have no obligation to cure any such objections other than those Landowner agrees in writing to cure; provided, however, that Landowner shall cause any liens or judgments affecting the Property to be released at or prior to closing. It shall be a condition of Company's obligation to close that Company be satisfied with the condition of title in Company's sole discretion.

E. **REPRESENTATIONS AND WARRANTIES**. The Purchase Agreement shall contain such representations and warranties as are customary in real estate purchase and sale agreements and in any event shall contain a warranty of title by Landowner and representations of authority by both Company and Landowner.

F. **ASSIGNMENT**: Company shall have the right to assign its interests in the Purchase Agreement without Landowner's consent. Company shall provide written notice to Landowner of any such assignment, sublease, transfer, or conveyance.

EXHIBIT B

PROPERTY

That certain property known as Greensville County Parcel 42-26 located on Cattail Creek Rd.

For informational purposes only, the Greensville County, VA Geographic Information System measures the property to be seventy two (72) acres.

REAL PROPERTY PURCHASE OPTION AGREEMENT

THIS REAL PROPERTY PURCHASE OPTION AGREEMENT (the "Option Agreement"), is effective as of the Effective Date (hereinafter defined) by and between Landowner (hereinafter defined) and Company (hereinafter defined). Landowner and Company may hereafter be referred to as, together, the "Parties" and each, a "Party".

RECITALS

A. Landowner is the owner of the Property (hereinafter defined).

B. Landowner desires to grant and convey to Company an exclusive option (the "Option") to purchase the Property (hereinafter defined).

AGREEMENT

IN CONSIDERATION of the foregoing and other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the Parties hereto agree as follows:

1. **Definitions.** The following terms have the definitions ascribed to such terms in the table below:

Term	Definition
"Effective Date"	December 5, 2016
"Landowner" (and address)	Connie Harrell, 4745 US Highway 301, Pleasant Hill, NC 27866 April Paige Banner, 913 Brunswick Road, Emporia VA 23847
"Company" (and address)	Solunesco, LLC Whose address for notice purposes hereunder is: Contracts Administration 1900 Campus Commons Drive, Suite 100 Reston, VA 20191 phone: (703) 300-8971 email: Info@solunesco.com
"Option Price"	The sum of (i) [redacted] for the first year of the Option Term (hereinafter defined), being due no later than thirty (30) days following the Effective Date, plus (ii) [redacted] for the second year of the Option Term, being due no later than the first anniversary of the Effective Date, plus (iii) [redacted] for the third year of the Option Term, being due no later than the second anniversary of the Effective Date, plus (iv) [redacted] for months thirty seven (37) through forty two (42) of the Option Term, being due no later than the third anniversary of the Effective Date.

Term	Definition
"Option Term"	The period commencing on the Effective Date and terminating at the end of the forty-second (42) month following the Effective Date. If Company requests an extension, the Parties shall negotiate in good faith for such extension if Company can reasonably demonstrate it has diligently pursued and incurred significant costs related to conducting its site specific due diligence for construction of the Solar Facility; applying for and obtaining necessary local land use permits and related approvals; securing project financing; or procuring the applicable solar facility equipment.
"Property"	That certain lot or tract of land located in Greensville County, VA described in "**Exhibit B"** attached hereto and made a part hereof for all purposes. The Property shall be determined by licensed survey.

2. **Option Terms & Payment**

    a. Landowner hereby grants Company an exclusive, irrevocable Option to purchase the Property.

    b. The Option shall be in effect during the Option Term, subject to Landowner's right to terminate this Option Agreement as set forth in Section 3.

    c. As consideration for the Option Term, Company shall pay to Landowner the Option Price.

3. **Termination of Option**. Company may, at its sole option, terminate this Option Agreement at any time, upon written notice to Landowner. Any payments made to Landowner before this Option Agreement is terminated shall be Landowner's property and need not be refunded in whole or in part. Landowner may terminate this Option Agreement by written notice to Company if Company fails to make any payment required by this Option Agreement and Landowner has provided written notice of such failure to Company and provided thirty (30) days to cure such failure.

4. **Exercise of Option**. Company may exercise the Option by (i) providing written notice of such exercise to Landowner at any time during the Option Term and (ii) delivering to Landowner a Purchase Agreement (herein so called) in a form prepared by Company containing the terms set forth on **"Exhibit A"** attached hereto and made a part hereof and such other matters as are customary and reasonable in real property purchase and sale agreements. Company shall provide a minimum of sixty (60) days' notice prior to the exercise of the Option. To the extent Landowner has any comments or objections to the Purchase Agreement, Landowner shall provide such comments or objections to Company no later than thirty (30) days following receipt of the Purchase Agreement, and the Parties shall negotiate in good faith to resolve such comments or objections no later than thirty (30) days following exercise of the Option; provided, however, that Landowner shall have no right to object to the Purchase Agreement to the extent the Purchase Agreement conforms to the terms of this Option Agreement and contains such other reasonable and

customary terms as are typically found in real estate purchase and sale agreements promulgated by industry groups in the area where the Property is located. Landowner shall execute and deliver to Company the Purchase Agreement promptly upon resolution of the form of same.

5. **Crop Damage**. The Parties anticipate and acknowledge that Landowner may suffer damage to crops, grass, fences, and other property or improvements on the Property during Company's construction, installation, decommissioning, relocation, and maintenance of Solar Facilities. Company shall pay Landowner for any such losses or damage to the extent such damages are outside the Leased Premises and for the removal of crops inside the Lease Premises as provided below. Except for such losses and damage, Company shall not be responsible for any losses of income, rent, business opportunities, profits or other losses arising out of Landowner's inability to grow crops on or otherwise use the Property. In the event that the commencement of construction begins prior to harvest resulting in Landowner's inability to harvest crops, Company will reimburse Landowner or tenant farmer for the greater of i) all documented costs of preparing the ground and planting, or ii) a sum equal to the product of the number of acres damaged within the Leased Premises, multiplied by the per-acre average market price for such crop in Greensville County, VA as reported by a mutually agreeable reference for pricing (e.g, $/acre from a local grainer for the relevant crop according to the local extension service). Landowner and Company agree to each use reasonable efforts to minimize crop damage.

6. **Net Timbering Value**. The Parties agree that i) the Company shall conduct timbering operations only on land purchased by the Company; and ii) the Company shall have the sole right, power and authority to conduct any timbering operations and all associated stump removal, chipping and removal of all brush and laps created by said timbering operations. The Company shall pay to the Landowner the Net Timbering Value prior to the Commercial Operations Date. [The Commercial Operations Date means the date which all testing and commissioning has been completed and is the initiation date to which the seller can start producing electricity for sale.] The Net Timbering Value shall mean the value received from the timber less all costs for stump removal, chipping and removal of all brush and laps created by said timbering operations. The Company will not seek payment from Landowner if the Net Timbering Value is negative. The Company shall provide to Landowner all documentation associated with the timbering, stump removal, chipping and removal of all brush and laps including but not limited to contracts, sales receipts, invoices, and bank drafts.

7. **Landowner Disturbances**. Except for the activities envisioned in Sections 5 and 6, Landowner shall not disturb the Property in any form during the Option Term without the express written consent of the Company.

8. **Authority**. Landowner represents and warrants to Company that Landowner is the sole owner of the Property and has the unrestricted right and authority to sign this Option Agreement; to grant Company the rights granted in this Option Agreement; and, to enter into the Purchase Agreement if Company exercises the Option. When signed by the Parties, this Option Agreement constitutes a valid and binding agreement enforceable against the Parties in accordance with its terms.

9. **Company's Due Diligence**. During the Option Term, Company or its representatives at Company's sole cost shall have the right of access to the Property for the purpose of installing equipment, making surveys, physical inspections and investigations, including but not limited to solar and environmental studies considered necessary by Company in connection with its proposed use of the Property under this Option Agreement and/or the Lease Agreement. Company will provide Landowner with reasonable prior notification of any entry on the Property. Company shall repair or reimburse Landowner for the cost of, any damages to the Property caused by its entry upon the Property. The Landowner shall cooperate with the Company and its representatives to prevent competing usage of the Property by third parties (e.g., hunting) while such due diligence is being performed pursuant to this Section 9.

10. **Taxes and Penalties**. Landowner will be held solely liable for any federal, state or local fines or penalties associated with disturbing of the Property illegally during the Option Term of this Option Agreement, except to the extent directly caused by the Company. Landowner shall also be responsible for all real estate taxes assessed against the Property.

11. **Exclusivity of Option**. Landowner shall not enter into a purchase or lease agreement with any other Party prior to the expiration or termination of this Option Agreement.

12. **Waiver of Consequential Damages**. IN NO EVENT SHALL THE COMPANY BE LIABLE TO LANDOWNER FOR ANY SPECIAL, CONSEQUENTIAL, INCIDENTAL, OR INDIRECT DAMAGES OR LOST PROFITS, HOWEVER CAUSED, ON ANY THEORY OF LIABILITY EVEN IF ADVISED OF SUCH A POSSIBILITY.

13. **Successors and Assigns**. This Option Agreement shall run with the land. Either Party may without the consent of the other assign its interest in this Option Agreement. Any assignment shall be subject to the terms and requirements of this Option Agreement. This Option Agreement shall inure to the benefit of and be binding upon the parties, their heirs, successors and assigns.

14. **Notices**. All notices or other communications required or permitted by this Option Agreement, shall be in writing and shall be deemed given or made when personally delivered or, in lieu of such personal service, five (5) days after deposit in the United States mail, first class, postage prepaid, certified, or one (1) business day after dispatch by Federal Express or other overnight delivery service of national scope, addressed as set forth in the table set forth hereinabove.

15. **Further Assurances.** Each Party agrees to cooperate with the other Party and to execute any additional documents reasonably necessary or proper to carry out the provisions and spirit of this Option Agreement. Without limitation of the foregoing, Landowner agrees, upon the written request of the Company, to execute and deliver to the Company a short form or memorandum of this Option Agreement in a recordable form, which document may be recorded by the Company in the real property records of the locality in which the Property is located.

16. **Purchase Agreement Controlling**. In the event a conflict arises between the terms and conditions of the Purchase Agreement and this Option Agreement, the Purchase Agreement shall control.

17. **Counterparts**. This Option Agreement may be executed in any number of counterparts, each of which shall be an original and all, when taken together, shall constitute one and the same document. Transmission by facsimile or electronic transmission by pdf of an executed counterpart of this Option Agreement shall be deemed to constitute due and sufficient delivery of such counterpart.

18. **Entire Agreement; Modification**. This document sets forth the entire agreement and understanding between the Parties relating to the subject matter herein and supersedes all prior discussions between the Parties. No modification of or amendment to this Option Agreement, nor any waiver of any rights under this Option Agreement, will be effective unless in writing signed by the Party to be charged.

19. **Waiver**. If either Party fails to require the other to perform any term of this Option Agreement, that failure does not prevent the Party from later enforcing that term. If either Party waives the other Party's breach of a term, that waiver is not treated as waiving a later breach of that term.

SIGNATURES TO FOLLOW ON NEXT PAGE

IN WITNESS WHEREOF, the Parties have executed this Option Agreement as the Effective Date.

Landowner:

Connie Harrell

By: Connie Harrell

April Paige Banner

By: April Banner

Company:

SolUnesco, LLC

a Virginia Limited Liability Company

By: F Hodsoll Dec 5, 2016

Name: Francis Hodsoll

Title: Chief Executive Officer

EXHIBIT A

SOLAR PURCHASE TERM SHEET

The Purchase Agreement shall contain provisions covering substantially the following terms and provisions:

A. **PURCHASE PRICE**: The purchase price shall be [redacted] for the Property (as defined herein). The Property shall be determined by licensed survey.

B. **EARNEST MONEY**: Company shall deposit with a title company designated by Company (the "Title Company") Earnest Money (herein so called) in the amount of [redacted] no later than three business days following the effective date of the Purchase Agreement. The Earnest Money shall be nonrefundable to Company in any event other than a default by Landowner or failure of any closing condition and shall be credited against the Purchase Price at closing if closing occurs. If Company fails to perform its obligations under the Purchase Agreement at closing, Landowner shall be entitled to retain the Earnest Money (and any Option Price paid) as liquidated damages for Company's default, all other remedies being waived by Landowner.

C. **CLOSING**: Closing shall occur no later than thirty (30) days following the effective date of the Purchase Agreement. At closing, Company shall pay the purchase price, and Landowner shall execute and deliver a general warranty deed and such other documents as are required by the Title Company to issue a title insurance policy to Company covering the Property, which title insurance policy shall be at Company's sole cost and expense. The Parties shall execute a settlement statement prepared by the Title Company. Real estate taxes shall be prorated as of the date of closing.

D. **TITLE AND SURVEY**: Company shall have the right to perform a survey of the Property and to have the Title Company issue a commitment for title insurance covering the Property and to make any objections to title and survey matters in Company's sole discretion. Landowner shall have no obligation to cure any such objections other than those Landowner agrees in writing to cure; provided, however, that Landowner shall cause any liens or judgments affecting the Property to be released at or prior to closing. It shall be a condition of Company's obligation to close that Company be satisfied with the condition of title in Company's sole discretion.

E. **REPRESENTATIONS AND WARRANTIES**. The Purchase Agreement shall contain such representations and warranties as are customary in real estate purchase and sale agreements and in any event shall contain a warranty of title by Landowner and representations of authority by both Company and Landowner.

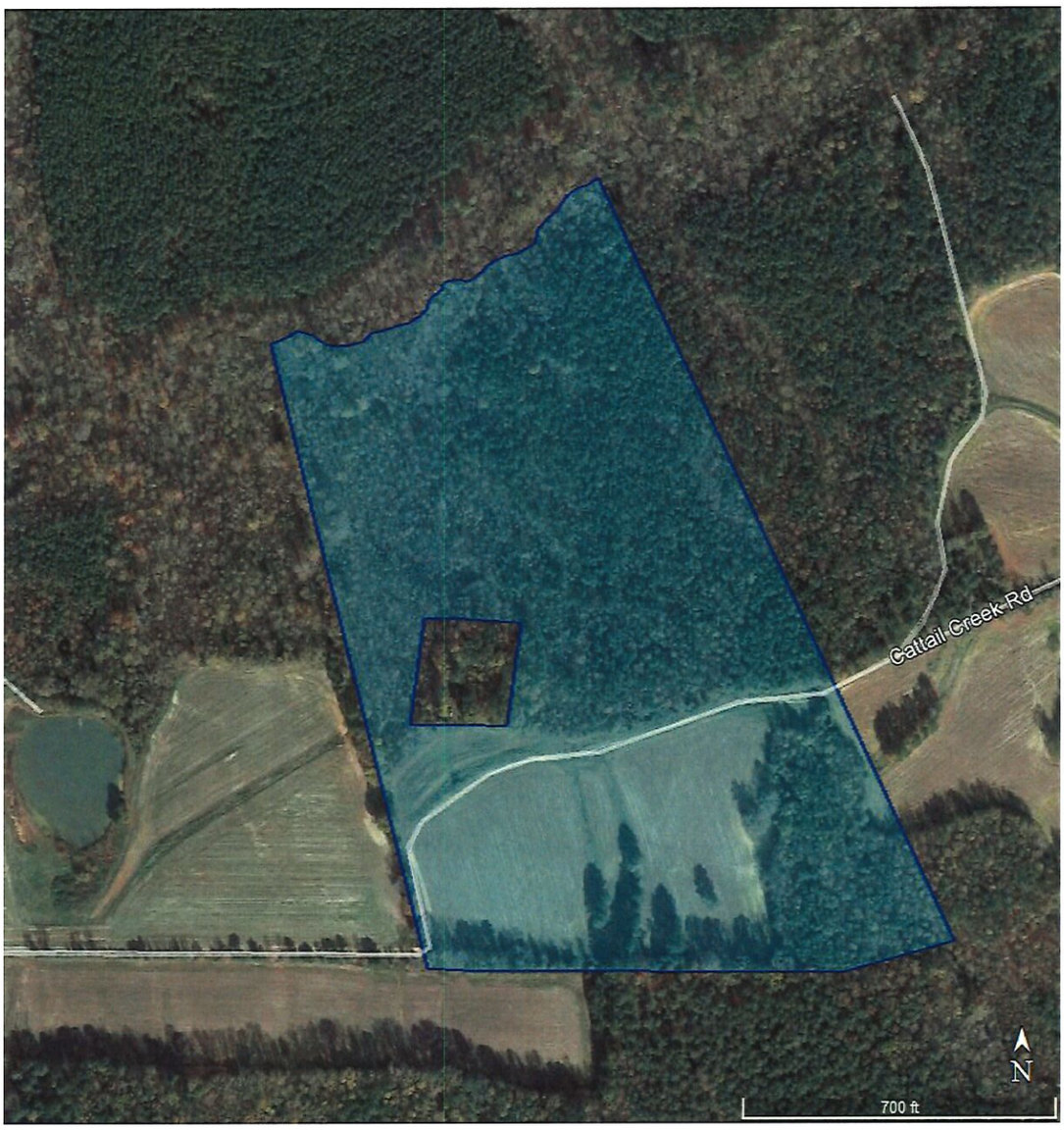
F. **ASSIGNMENT**: Company shall have the right to assign its interests in the Purchase Agreement without Landowner's consent. Company shall provide written notice to Landowner of any such assignment, sublease, transfer, or conveyance.

EXHIBIT B

PROPERTY

That certain property known as Greensville County Parcel 42-27 located on Cattail Creek Rd.

For informational purposes only, the Greensville County, VA Geographic Information System measures the property to be thirty-six and 50/100 (36.5) acres.



Francis Hodsoll, Agent for Meherrin Solar LLC
Meherrin Solar LLC
75 State Street
Suite 2701
Boston, MA 02109

Re: Greensville County Parcel, Tax Map 42 and Lot 27A, further identified by the county's GPIN number of 7337-19-8782 ("Property")

Dear Francis Hobbs:

This is further to our discussions and our agreement to negotiate and enter into a binding option to purchase agreement ("Option Agreement") for the Property.

The Option Agreement will include the following terms:

1. Landowner – Francis Hobbs
2. Buyer – Mererrin Solar LLC
3. Property – as above, vacant property
4. Term of Option – three (3) years.
5. Amount paid as deposit on the signing of the Option - [redacted] FKH
6. Purchase Price for Property - [redacted] All option payments previously paid at time of purchase shall be credited towards this purchase price.
7. Property will be free and clear of all liens.

We agree to use our commercially reasonable efforts to finalize and sign the Option Agreement on or before May 31, 2017, failing which neither of us will be liable to the other and this letter will be of no further force or effect.

If the foregoing is satisfactory, please sign where indicated below.

Thanks very much.

The foregoing is agreed.

Francis K Hobbs — May 24, 2017
Landowner, Francis Hobbs — Date

May 24, 2017
Francis Hodsoll, CEO, SolUnesco & Agent for Meherrin Solar — Date

AMENDED AND RESTATED
REAL PROPERTY PURCHASE OPTION AGREEMENT

THIS AMENDED AND RESTATED REAL PROPERTY PURCHASE OPTION AGREEMENT (the "Option Agreement"), is made and entered into effective as of May 24, 2017, by and between Lois P. Allen ("Landowner") and Meherrin Solar LLC ("Company"). Landowner and Company may hereafter be referred to as, together, the "Parties" and each, a "Party".

RECITALS

A. Landowner is the owner of the Property (hereinafter defined).

B. Landowner and SolUnesco, LLC ("SolUnesco") are parties to that certain Real Property Purchase Option Agreement entered into on December 5, 2016 (the "Original Option Agreement"), pursuant to which Landowner granted and conveyed to SolUnesco an exclusive option to purchase the Property.

C. SolUnesco has assigned to Company all of its rights, title and interest in the Original Option Agreement and the Property pursuant to Section 13 of the Original Option Agreement.

D. The Parties desire to amend and restate the Original Option Agreement in order to modify the description of the Property, the purchase price and certain other terms, all as more specifically described herein.

AGREEMENT

IN CONSIDERATION of the foregoing and other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the Parties hereby amend and restated the Original Option Agreement as follows:

1. **Definitions**. The following terms have the definitions ascribed to such terms in the table below:

Term	Definition
"Effective Date"	December 4, 2016
"Landowner" (and address)	Lois P. Allen 1218 Fountain Creek Rd., Emporia, Virginia 23847
"Company" (and address)	Meherrin Solar LLC c/o SolUnesco, LLC, as agent fro Meherrin Solar LLC 75 State Street, Suite 2701 Boston, Massachusetts 02109 phone: (703) 300-8971 email: info@solunesco.com

Term	Definition
"Option"	Has the meaning set forth in Section 2.a. hereinbelow.
"Option Agreement"	Has the meaning set forth in the introductory clause hereinabove, and includes the Recitals and the Schedules attached hereto, all of which form an integral part of this Option Agreement for all purposes.
"Option Price"	The sum of (i) [redacted] for the first year of the Option Term (hereinafter defined), being due no later than thirty (30) days following the Effective Date, plus (ii) [redacted] for the second year of the Option Term, being due no later than the first anniversary of the Effective Date, plus (iii) [redacted] for the third year of the Option Term, being due no later than the second anniversary of the Effective Date. The sum of any Option Price payment shall be credited towards the Purchase Price (as defined in Section A of Exhibit A).
"Option Term"	The period commencing on the Effective Date and terminating on the **third (3rd)** anniversary of the Effective Date. If Company requests an extension, the Parties shall negotiate in good faith for such extension if Company can reasonably demonstrate it has diligently pursued and incurred significant costs related to conducting its site specific due diligence for the construction of Solar Facilities (hereinafter defined); applying for and obtaining necessary local land use permits and related approvals; securing project financing; or procuring applicable Solar Facility equipment.
"Property"	The real property located in Greensville County, Virginia described in "**Exhibit B**" attached hereto and made a part hereof for all purposes.
"Solar Facilities"	Any and all solar energy conversion systems, including, without exclusion, solar photovoltaic panels (including concentrating solar photovoltaic equipment), batteries and/or other energy storage devices, solar resource measurement equipment, support structures, foundations, pads, footings, fencing, electrical inverters and transformers, meters, switches, breakers, fixtures, equipment storage, electric wiring, distribution and transmission lines, access roads, interconnection facilities and related structures and facilities and equipment, to capture the flow of all radiant energy emitted from the sun for electric power, heat or stream generation purposes or otherwise.

2. **Option Terms & Payment**.

   a. Landowner hereby grants and conveys to Company an exclusive, irrevocable Option to purchase the Property from Landowner, subject to the terms and conditions contained in this Option Agreement (the "Option").

   b. The Option shall be in effect during the Option Term, subject to Landowner's right to terminate this Option Agreement as set forth in Section 3.

c. As consideration for the Option, Company shall pay to Landowner the Option Price.

3. **Termination of Option**. Company may, at its sole option, terminate this Option Agreement at any time upon written notice to Landowner. Any payments made to Landowner before this Option Agreement is terminated shall be Landowner's property and need not be refunded in whole or in part. Landowner may terminate this Option Agreement by written notice to Company if Company fails to make any payment required by this Option Agreement and Landowner has provided written notice of such failure to Company and provided thirty (30) days to cure such failure.

4. **Exercise of Option.** Company may exercise the Option by (i) providing written notice of such exercise to Landowner at any time during the Option Term and (ii) delivering to Landowner a Purchase Agreement (herein so called) in a form prepared by Company containing the terms set forth on **"Exhibit A"** attached hereto and made a part hereof and such other matters as are customary and reasonable in real property purchase and sale agreements. Company shall provide a minimum of sixty (60) days' notice prior to the exercise of the Option and the Company and Landowner shall work in good faith to negotiate the final terms of the Purchase Agreement within thirty (30) days of Landowner's receipt of the Purchase Agreement from the Company. The Landowner shall have no right to object to the Purchase Agreement to the extent the Purchase Agreement conforms to the terms of this Option Agreement and contains such other reasonable and customary terms as are typically found in real estate purchase and sale agreements promulgated by industry groups in the area where the Property is located. Landowner shall execute and deliver to Company the Purchase Agreement promptly upon resolution of the form of same.

5. **Crop Damage.** The Parties anticipate and acknowledge that Company may have to remove crops on the Property during the Option Term as a result of the Company's due diligence. Company shall pay Landowner for such removal of crops on the Property as provided below. In the event that the Property is purchased and sold in accordance with the terms of this Option Agreement and the commencement of construction begins prior to harvest resulting in Landowner's inability to harvest crops, Company will reimburse Landowner or tenant farmer for the greater of i) all documented costs of preparing the ground and planting, or ii) a sum equal to the product of the number of acres damaged on the purchased Property, multiplied by the per-acre average market price for such crop in Greensville County, Virginia, as reported by a mutually agreeable reference for pricing (e.g, $/acre from a local grainer for the relevant crop according to the local extension service). Landowner and Company agree to each use reasonable efforts to minimize crop damage, subject to a pro rata adjustment for the portion of the growing period completed (e.g., for a 110-day growing period and Company occupancy occurs on the 55th day, the percentage is 50%). Except for the reimbursement provision set forth above, Company shall not be responsible for any losses of income, rent, business opportunities, profits or other losses arising out of Landowner's inability to grow crops on or otherwise use the Property.

6. **Net Timbering Value**. The Parties agree that i) the Company shall conduct timbering operations only on the purchased Property; and ii) the Company shall have the sole right, power and authority

to conduct any timbering operations and all associated stump removal, chipping and removal of all brush and laps created by said timbering operations. The Company shall pay to the Landowner the Net Timbering Value prior to the Commercial Operations Date. The Commercial Operations Date means the date which all testing and commissioning of the Solar Facilities have been completed and is the initiation date to which the seller can start producing electricity for sale. The Net Timbering Value shall mean the value received from the timber less all costs for stump removal, chipping and removal of all brush and laps created by said timbering operations. The Company will not seek payment from Landowner if the Net Timbering Value is negative. The Company shall provide to Landowner all documentation associated with the timbering, stump removal, chipping and removal of all brush and laps including but not limited to contracts, sales receipts, invoices, and bank drafts.

7. **Landowner Disturbances.** Landowner shall not disturb the Property in any form during the Option Term without the express written consent of the Company.

8. **Authority**. Landowner represents and warrants to Company that Landowner is the sole owner of the Property and has the unrestricted right and authority: to sign this Option Agreement; to grant Company the rights granted in this Option Agreement; and, to enter into the Purchase Agreement if Company exercises the Option. When signed by the parties, this Option Agreement constitutes a valid and binding agreement enforceable against the Parties in accordance with its terms.

9. **Company's Due Diligence**. During the Option Term, Company or its representatives at Company's sole cost shall have the right of access to the Property for the purpose of installing equipment, making surveys, physical inspections and investigations, including but not limited to solar and environmental studies considered necessary by Company in connection with its proposed use of the Property under this Option Agreement or the Purchase Agreement. Company will provide Landowner with reasonable prior notification of any entry on the Property. Company shall repair or reimburse Landowner for the cost of any damages to property caused by its entry upon the Property. The Landowner shall cooperate with the Company and its representatives to prevent competing usage of the Property by third parties (e.g., hunting) while such due diligence is being performed pursuant to this section.

10. **Taxes and Penalties**. Landowner will be held solely liable for any federal, state or local fines or penalties associated with disturbing of the Property illegally during the Option Term, except to the extent directly caused by the Company. Landowner shall also be responsible for all real estate taxes assessed against the Property during the Option Term.

11. **Certain Landowner Representations**. Landowner hereby certifies, represents and warrants the following matters to Company:

    a. Landowner has received full payment of the portion of the Option Price payable for the first year of the Option Term;

    b. Landowner has not assigned the Original Option Agreement;

c. Landowner has paid all real property taxes and assessments, general and special, whenever such taxes and assessments were due and payable; and

d. No default has occurred and is continuing and no event occurred which constitutes or which, with the giving of notice, lapse of time or otherwise, would constitute a default under the Deed of Trust and Security Agreement from Landowner to N. Leslie Saunders, Jr. and Gary B. Patterson, Trustees for the benefit of Norman R. Seay, dated June 7, 2012 and recorded June 8, 2012 as Instrument No. 120000618, securing the original principal sum of $120,000.00.

12. **Exclusivity of Option**. Landowner shall not enter into any agreement or option with any third party to purchase, lease or occupy the Property prior to the expiration or termination of this Option Agreement. Landowner represents and warrants that no person has any agreement or option to purchase, lease or occupy the Property or, if any person has such an agreement or option, Landowner may terminate same at its sole discretion.

13. **Waiver of Consequential Damages**. IN NO EVENT SHALL THE COMPANY BE LIABLE TO LANDOWNER FOR ANY SPECIAL, CONSEQUENTIAL, INCIDENTAL, OR INDIRECT DAMAGES OR LOST PROFITS, HOWEVER CAUSED, ON ANY THEORY OF LIABILITY EVEN IF ADVISED OF SUCH A POSSIBILITY.

14. **Successors and Assigns**. This Option Agreement shall run with the land. Either Party may without the consent of the other assign its interest in this Option Agreement. Any assignment shall be subject to the terms and requirements of this Option Agreement. This Option Agreement shall inure to the benefit of and be binding upon the parties, their heirs, successors and assigns.

15. **Notices**. All notices or other communications required or permitted by this Option Agreement, shall be in writing and shall be deemed given or made when personally delivered or, in lieu of such personal service, five (5) days after deposit in the United States mail, first class, postage prepaid, certified, or one (1) business day after dispatch by Federal Express or other overnight delivery service of national scope, addressed as set forth in the table set forth hereinabove.

16. **Further Assurances**. Each Party agrees to cooperate with the other Party and to execute any additional documents reasonably necessary or proper to carry out the provisions and spirit of this Option Agreement. Without limitation of the foregoing, Landowner agrees upon the written request of the Company to execute and deliver to the Company a short form or memorandum of this Option Agreement in a recordable form, which document may be recorded by Company in the real property records of the locality in which the Property is located.

17. **Purchase Agreement Controlling**. In the event a conflict arises between the terms and conditions of the Purchase Agreement and this Option Agreement, the Purchase Agreement shall control.

18. **Counterparts**. This Option Agreement may be executed in any number of counterparts, each of which shall be an original and all, when taken together, shall constitute one and the same document. Transmission by facsimile or electronic transmission by pdf of an executed counterpart of this Option Agreement shall be deemed to constitute due and sufficient delivery of such

counterpart.

19. **Entire Agreement; Modification**. This Option Agreement sets forth the entire agreement and understanding between the Parties with respect to the subject matter hereof and supersedes all prior discussions and agreements between the Parties, both written and oral, including, without limitation, the Original Option Agreement. Upon the execution and delivery of this Option Agreement by the Parties, the Original Option Agreement shall be null and void and of no further force or effect. No modification of or amendment to this Option Agreement, nor any waiver of any rights under this Option Agreement, will be effective unless in writing signed by the Party to be charged.

20. **Waiver**. If either Party fails to require the other to perform any term of this Option Agreement, that failure does not prevent the Party from later enforcing that term. If either Party waives the other Party's breach of a term, that waiver is not treated as waiving a later breach of that term.

21. **Governing Law**. This Option Agreement shall be governed by and construed in accordance with the internal laws of the Commonwealth of Virginia, without regard to any conflict of laws provision that would require the application of the law of any other jurisdiction.

SIGNATURES TO FOLLOW ON NEXT PAGE

IN WITNESS WHEREOF, the Parties have each executed this Option Agreement as of the date set forth below their signatures.

Landowner:

By: Lois P. Allen

Date: 5/24/17

Name: Lois P. Allen

Company:

Meherrin Solar LLC
a Delaware Limited Liability Company

By:

Date: 24 May 2017

Name: Terence Hartford

Title: Director, Project Development

By: _____

Date:

Name:

Title:

EXHIBIT A

PURCHASE AGREEMENT TERM SHEET

The Purchase Agreement shall contain provisions covering substantially the following terms and provisions:

A. **PURCHASE PRICE:** The purchase price shall be [redacted] (the "Purchase Price") for the Property purchased as identified in Exhibit B as determined by the Company's certified property survey conducted prior to the purchase.

B. **EARNEST MONEY:** Company shall deposit with a title company designated by Company (the "Title Company") Earnest Money (herein so called) in the amount of [redacted] no later than three business days following the effective date of the Purchase Agreement. The Earnest Money shall be nonrefundable to Company in any event other than a default by Landowner or failure of any closing condition and shall be credited against the Purchase Price at closing if closing occurs. If Company fails to perform its obligations under the Purchase Agreement at closing, Landowner shall be entitled to retain the Earnest Money (and any Option Price paid) as liquidated damages for Company's default, all other remedies being waived by Landowner.

C. **CLOSING:** Closing shall occur no later than thirty (30) days following the effective date of the Purchase Agreement. At closing, Company shall pay the purchase price, and Landowner shall execute and deliver a general warranty deed and such other documents as are required by the Title Company to issue a title insurance policy to Company covering the Property, which title insurance policy shall be at Company's sole cost and expense. The Parties shall execute a settlement statement prepared by the Title Company. Real estate taxes shall be prorated as of the date of closing.

D. **TITLE AND SURVEY:** Company shall have the right to perform a survey of the Property and to have the Title Company issue a commitment for title insurance covering the Property and to make any objections to title and survey matters in Company's sole discretion. Landowner shall have no obligation to cure any such objections other than those Landowner agrees in writing to cure; provided, however, that Landowner shall cause any liens or judgments affecting the Property to be released at or prior to closing. It shall be a condition of Company's obligation to close that Company be satisfied with the condition of title in Company's sole discretion.

E. **REPRESENTATIONS AND WARRANTIES.** The Purchase Agreement shall contain such representations and warranties as are customary in real estate purchase and sale agreements and in any event shall contain a warranty of title by Landowner and representations of authority by both Company and Landowner.

F. **ASSIGNMENT:** Company shall have the right to assign its interests in the Purchase Agreement without Landowner's consent. Company shall provide written notice to Landowner of any such assignment, sublease, transfer, or conveyance.

EXHIBIT B
PROPERTY

The Property consists of the following parcels:

- That certain property known as Greensville County Parcel 42-37 (tax map) also identified by the Greensville County GPIN: 7337-19-0679 located on Fountain Creek Rd.;
- That certain property known as Greensville County Parcel 42-37B (tax map) also identified by the Greensville County GPIN: 7337-09-5344 located on Fountain Creek Rd.; and
- That certain property known as Greensville County Parcel 42-37F (tax map) also identified by the Greensville County GPIN: 7337-09-5535 located on Fountain Creek Rd.;

For informational purposes only, the Greensville County, Virginia Geographic Information System measures the Property to be thirty and fifty-four point five/hundredths (30.545) acres.

REAL PROPERTY PURCHASE OPTION AGREEMENT

THIS REAL PROPERTY PURCHASE OPTION AGREEMENT (the "Option Agreement"), is effective as of the Effective Date (hereinafter defined), and is by and between Landowner (hereinafter defined) and Company (hereinafter defined). Landowner and Company may hereafter be referred to as, together, the "Parties" and each, a "Party".

RECITALS

A. Landowner is the owner of the Property (hereinafter defined).

B. Landowner desires to grant and convey to Company an exclusive option (the "Option") to purchase the Property (hereinafter defined) or a portion thereof.

AGREEMENT

IN CONSIDERATION of the foregoing and other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the Parties hereto agree as follows:

1. **Definitions.** The following terms have the definitions ascribed to such terms in the table below:

Term	Definition
"Effective Date"	February 4, 2016
"Landowner" (and address)	Gordon C. Williams, Jr. 1560 Grassy Pond Road, Emporia, VA 23847
"Company" (and address)	Solunesco, LLC Whose address for notice purposes hereunder is: Contracts Administration 1900 Campus Commons Drive, Suite 100 Reston, VA 20191 phone: (703) 300-8971 email: Info@solunesco.com
"Option Price"	The sum of (i) [redacted] for the first year of the Option Term (hereinafter defined), being due no later than thirty (30) days following the Effective Date, plus (ii) [redacted] for the second year of the Option Term, being due no later than the first anniversary of the Effective Date, plus (iii) [redacted] for the third year of the Option Term, being due no later than the second anniversary of the Effective Date, plus (iv) [redacted] for the fourth year of the Option Term, being due no later than the third anniversary of the Effective Date, plus (v) [redacted] for the fifth year of the Option Term, being due no later than the fourth anniversary of the Effective Date.

Term	Definition
"Option Term"	The period commencing on the Effective Date and terminating on the **fifth (5th)** anniversary of the Effective Date. If Company requests an extension, the Parties shall negotiate in good faith for such extension if Company can reasonably demonstrate it has diligently pursued and incurred significant costs related to conducting its site specific due diligence for construction of the Solar Facility; applying for and obtaining necessary local land use permits and related approvals; securing project financing; or procuring applicable solar facility equipment.
"Property"	The real property located in Greensville County, Virginia described in "**Exhibit B**" attached hereto and made a part hereof for all purposes.

2. **Option Terms & Payment**.
    a. Landowner hereby grants Company an exclusive, irrevocable Option to purchase the Property from Landowner, subject to the terms and conditions contained in this Option Agreement.
    b. The Option shall be in effect during the Option Term, subject to Landowner's right to terminate this Option Agreement as set forth in Section 3.
    c. As consideration for the Option Term, Company shall pay to Landowner the Option Price.

3. **Termination of Option**. Company may, at its sole option, terminate this Option Agreement at any time upon written notice to Landowner. Any payments made to Landowner before this Option Agreement is terminated shall be Landowner's property and need not be refunded in whole or in part. Landowner may terminate this Option Agreement by written notice to Company if Company fails to make any payment required by this Option Agreement and Landowner has provided written notice of such failure to Company and provided thirty (30) days to cure such failure.

4. **Exercise of Option**. Company may exercise the Option by (i) providing written notice of such exercise to Landowner at any time during the Option Term and (ii) delivering to Landowner a Purchase Agreement (herein so called) in a form prepared by Company containing the terms set forth on **"Exhibit A"** attached hereto and made a part hereof and such other matters as are customary and reasonable in real property purchase and sale agreements. Company shall provide a minimum of sixty (60) days' notice prior to the exercise of the Option and the Company and Landowner shall work in good faith to negotiate the final terms of the Purchase Agreement within thirty (30) days of Landowner's receipt of the Purchase Agreement from the Company. The Landowner shall have no right to object to the Purchase Agreement to the extent the Purchase Agreement conforms to the terms of this Option Agreement and contains such other reasonable and customary terms as are typically found in real estate purchase and sale agreements in the solar industry. Landowner shall execute and deliver to Company the Purchase Agreement promptly upon resolution of the form of same.

5. **Landowner Disturbances.** Landowner shall not disturb the Property in any form during the Option Term without the express written consent of the Company.

6. **Authority**. Landowner represents and warrants to Company that Landowner is the sole owner of the Property and has the unrestricted right and authority to sign this Option Agreement; to grant Company the rights granted in this Option Agreement; and, to enter into the Purchase Agreement if Company exercises the Option. When signed by the parties, this Option Agreement constitutes a valid and binding agreement enforceable against the Parties in accordance with its terms.

7. **Company's Due Diligence**. During the Option Term, Company or its representatives at Company's sole cost shall have the right of access to the Property for the purpose of installing equipment, making surveys, physical inspections and investigations, including but not limited to solar and environmental studies considered necessary by Company in connection with its proposed use of the Property under the Option Agreement of the Purchase and Sale Agreement. Company will provide Landowner with reasonable prior notification of any entry on the Property. Company shall repair or reimburse Landowner for the cost of, any damages to property caused by its entry upon the Property. The Landowner shall cooperate with the Company and its representatives to prevent competing usage of the Property by third parties (e.g., hunting) while such due diligence is being performed pursuant to this section.

8. **Indemnification of Landowner by Company**. Company shall protect Landowner and, both during and after the term of this Agreement, keep it fully and effectively indemnified and harmless against all Losses suffered, awarded against or incurred by Landowner on account of injury, death or property damage to the extent that they are the sole result of or solely attributable to a wrongful act or negligence of Company or of its employees or agents. Company shall not be liable for consequential, indirect, incidental or punitive damages sustained by Landowner.

9. **Taxes and Penalties**. Landowner will be held solely liable for any federal, state or local fines or penalties associated with disturbing of the Property illegally during the Option Term of this Option Agreement, except to the extent directly caused by the Company. Landowner shall also be responsible for all real estate taxes assessed against the Property.

10. **Exclusivity of Option**. Landowner shall not enter into a purchase or lease agreement with any other Party prior to the expiration or termination of this Option Agreement.

11. **Waiver of Consequential Damages**. EXCEPT AS OTHERWISE PROVIDED IN THIS OPTION AGREEMENT, IN NO EVENT SHALL THE COMPANY BE LIABLE TO LANDOWNER FOR ANY SPECIAL, CONSEQUENTIAL, INCIDENTAL, OR INDIRECT DAMAGES OR LOST PROFITS, HOWEVER CAUSED, ON ANY THEORY OF LIABILITY EVEN IF ADVISED OF SUCH A POSSIBILITY.

12. **Successors and Assigns**. This Option Agreement shall run with the land. Either Party may without the consent of the other assign its interest in this Option Agreement. Any assignment shall be subject to the terms and requirements of this Option Agreement. This Option Agreement shall inure to the benefit of and be binding upon the parties, their heirs, successors and assigns.

13. **Notices**. All notices or other communications required or permitted by this Option Agreement, shall be in writing and shall be deemed given or made when personally delivered or, in lieu of such personal service, five (5) days after deposit in the United States mail, first class, postage prepaid, certified, or one (1) business day after dispatch by Federal Express or other overnight delivery service of national scope, addressed as set forth in the table set forth hereinabove.

14. **Further Assurances**. Each Party agrees to cooperate with the other Party and to execute any additional documents reasonably necessary or proper to carry out the provisions and spirit of this Option Agreement. Without limitation of the foregoing, Landowner agrees upon the written request of the Company to execute and deliver to the Company a short form or memorandum of this Option Agreement in a recordable form, which document may be recorded by Company in the real property records of the locality in which the Property is located.

15. **Purchase Agreement Controlling**. In the event a conflict arises between the terms and conditions of the Purchase Agreement and this Option Agreement, the Purchase and Sale Agreement shall control.

16. **Counterparts**. This Option Agreement may be executed in any number of counterparts, each of which shall be an original and all, when taken together, shall constitute one and the same document. Transmission by facsimile or electronic transmission by pdf of an executed counterpart of this Option Agreement shall be deemed to constitute due and sufficient delivery of such counterpart.

17. **Entire Agreement; Modification**. This document sets forth the entire agreement and understanding between the Parties relating to the subject matter herein and supersedes all prior discussions between the Parties. No modification of or amendment to this Option Agreement, nor any waiver of any rights under this Option Agreement, will be effective unless in writing signed by the Party to be charged.

18. **Waiver**. If either Party fails to require the other to perform any term of this Option Agreement, that failure does not prevent the Party from later enforcing that term. If either Party waives the other Party's breach of a term, that waiver is not treated as waiving a later breach of that term.

SIGNATURES TO FOLLOW ON NEXT PAGE

IN WITNESS WHEREOF, the Parties have executed this Option Agreement as the Effective Date.

Landowners:

By: Gordon C. Williams, Jr
Gordon c. Williams,Jr (Feb 6, 2017)

Date: Feb 6, 2017

Name: Gordon C. Williams, Jr.

Company:

SolUnesco, LLC
a Virginia Limited Liability Company

By: _____

Date: Feb 6, 2017

Name: Francis Hodsoll
Title: Chief Executive Officer

EXHIBIT A

PURCHASE AGREREMENT TERM SHEET

The Purchase Agreement shall contain provisions covering substantially the following terms and provisions:

A. **PURCHASE PRICE**: The purchase price shall be [redacted] for the Property purchased as identified in Exhibit B as determined by the Company's certified property survey conducted prior to the purchase.

B. **EARNEST MONEY**: Company shall deposit with a title company designated by Company (the "Title Company") Earnest Money (herein so called) in the amount of [redacted] no later than three business days following the effective date of the Purchase Agreement. The Earnest Money shall be nonrefundable to Company in any event other than a default by Landowner or failure of any closing condition and shall be credited against the Purchase Price at closing if closing occurs. If Company fails to perform its obligations under the Purchase Agreement at closing, Landowner shall be entitled to retain the Earnest Money (and any Option Price paid) as liquidated damages for Company's default, all other remedies being waived by Landowner.

C. **CLOSING**: Closing shall occur no later than thirty (30) days following the effective date of the Purchase Agreement. At closing, Company shall pay the purchase price, and Landowner shall execute and deliver a general warranty deed and such other documents as are required by the Title Company to issue a title insurance policy to Company covering the Property, which title insurance policy shall be at Company's sole cost and expense. The Parties shall execute a settlement statement prepared by the Title Company. Real estate taxes shall be prorated as of the date of closing.

D. **CROP DAMAGE:** The Parties anticipate and acknowledge that Landowner may suffer damage to crops, grass, fences, and other property or improvements on the Property during Option Term as a result of the Company's due diligence. Company shall pay Landowner for any such losses or damage to the extent such damages are outside the Purchased Premises and for the removal of crops inside the Purchased Premises as provided below. Except for such losses and damage, Company shall not be responsible for any losses of income, rent, business opportunities, profits or other losses arising out of Landowner's inability to grow crops on or otherwise use the Property. In the event that the commencement of construction begins prior to harvest resulting in Landowner's inability to harvest crops, Company will reimburse Landowner or tenant farmer for the greater of i) all documented costs of preparing the ground and planting, or ii) a sum equal to the product of the number of acres damaged within the Purchased Premises, multiplied by the per-acre average market price for such crop in Greensville County, Virginia, as reported by a mutually agreeable reference for pricing (e.g, $/acre from a local grainer for the relevant crop according to the local extension service), subject to a pro rata adjustment for the portion of the growing period completed (e.g., for a 110 day growing period and Company occupancy occurs on the 55th day, the percentage is 50%). Landowner and Company agree to each use reasonable

efforts to minimize crop damage.

E. **TIMBERING AND TIMBER VALUE:** The Parties agree that the Company shall conduct timbering operations on the Property and the Purchase Prices in Exhibit A compensates the landowner for the value of the timber. The Company shall have the sole right, power and authority to conduct any timbering operations and all associated stump removal, chipping and removal of all brush and laps created by said timbering operations.

F. **TITLE AND SURVEY:** Company shall have the right to perform a survey of the Property and to have the Title Company issue a commitment for title insurance covering the Property and to make any objections to title and survey matters in Company's sole discretion. Landowner shall have no obligation to cure any such objections other than those Landowner agrees in writing to cure; provided, however, that Landowner shall cause any liens or judgments affecting the Property to be released at or prior to closing. It shall be a condition of Company's obligation to close that Company be satisfied with the condition of title in Company's sole discretion.

G. **REPRESENTATIONS AND WARRANTIES.** The Purchase Agreement shall contain such representations and warranties as are customary in real estate purchase and sale agreements and in any event shall contain a warranty of title by Landowner and representations of authority by both Company and Landowner.

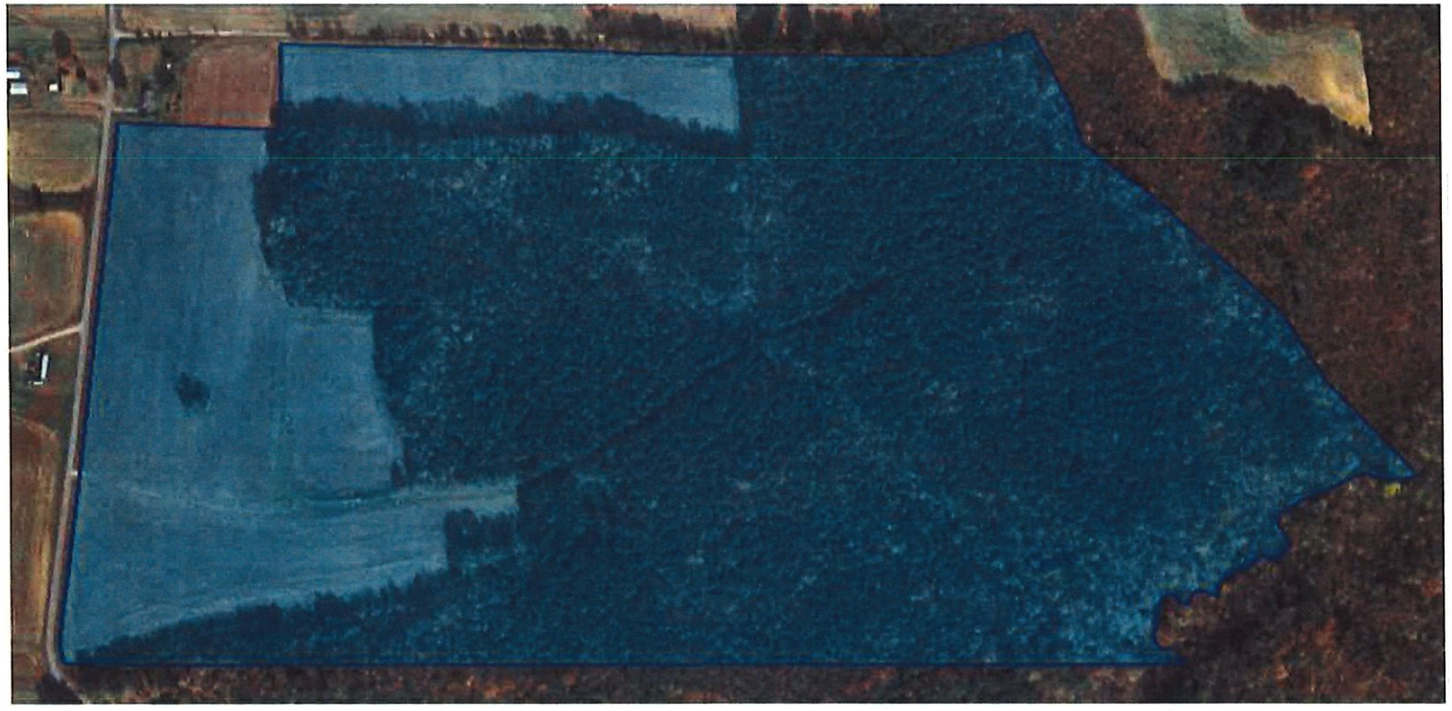
H. **ASSIGNMENT**: Company shall have the right to assign its interests in the Purchase Agreement without Landowner's consent. Company shall provide written notice to Landowner of any such assignment, sublease, transfer, or conveyance.

EXHIBIT B

PROPERTY

That certain property known as Greensville Parcels 42-39 also identified by the Greensville County GPIN: 7337-18-9177 located on Fountain Creek Rd.

For informational purposes only, the Greensville County, Virginia Geographic Information System measures the property to be one hundred and six and 00/hundredths (106.00) acres.



SOLAR ENERGY OPTION AGREEMENT

THIS SOLAR ENERGY OPTION AGREEMENT (the "Option Agreement"), is effective as of the Effective Date (hereinafter defined) by and between Landowner (hereinafter defined) and Company (hereinafter defined). Landowner and Company may hereafter be referred to as, together, the "Parties" and each, a "Party".

RECITALS

A. Landowner is the owner of the Property (hereinafter defined).

B. Landowner desires to grant and convey to Company an exclusive option (the "Option") to acquire the Solar Rights (hereinafter defined) on the Property to be determined in accordance with the further provisions hereof.

C. Landowner desires to maintain the right to choose between a lease or a sale of the property prior to the Company's exercise of the Option.

AGREEMENT

IN CONSIDERATION of the foregoing and other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the Parties hereto agree as follows:

1. DEFINITIONS. The following terms have the definitions ascribed to such terms in the table below:

Term	Definition
"EFFECTIVE DATE"	November 23, 2016
"LANDOWNER" (and address)	Dane Little and Kellie B. Little 4171 Brink Road, Emporia, VA 23847
"COMPANY" (and address)	SolUnesco, LLC Whose address for notice purposes hereunder is: Contracts Administration 1900 Campus Commons Drive, Suite 100 Reston, VA 20191 phone: (703) 300-8971 email: Info@solunesco.com
"OPTION PRICE"	The sum of (i) [redacted] for the first year of the Option Term, being due no later than thirty (30) days following the Effective Date, plus (ii) [redacted] for the second year of the Option Term, being due no later than the first anniversary of the Option Term, plus (iii) [redacted] for the third year of the Option Term, being due no later than the second anniversary of the Option Term.

Term	Definition
"OPTION TERM"	The period commencing on the Effective Date and terminating on the third (3rd) anniversary of the Effective Date. If Company requests an extension, the Parties shall negotiate in good faith for such extension if Company can demonstrate it has diligently pursued and incurred significant costs related to conducting its site specific due diligence for construction of the Solar Facility; applying for and obtaining necessary local land use permits and related approvals; securing project financing; or procuring the Solar Facility Equipment.
"PROPERTY"	The real property located in Greensville County, Virginia described in "Exhibit C-1" attached hereto and made a part hereof for all purposes. Based on consultations with the Landowner, the company has modified the property boundary line relative to the boundary line provided by Greensville County Geographic Information System. The Property shall be determined by licensed survey.
"SOLAR RIGHTS"	The right to capture the unobstructed flow of all radiant energy emitted from the sun upon, over and across the Leased Premises or any portion of the Leased Premises for electric power, heat and/or steam generation purposes, including the right to construct, operate and maintain solar energy conversion systems, including, without exclusion, solar photovoltaic panels (including concentrating solar photovoltaic equipment), batteries and/or other energy storage devices, solar resource measurement equipment, support structures, foundations, pads, footings, fencing, electrical inverters and transformers, meters, switches, breakers, fixtures, equipment storage, electric wiring, distribution and transmission lines, access roads, interconnection facilities and related structures and facilities and equipment, together with certain easement and/or leasehold rights for access, utilities and other appurtenant rights to the foregoing.

2. Grant of Option. Landowner grants Company an exclusive, irrevocable Option to acquire the Solar Rights. Said Option shall be in effect during the Option Term for so long as the Option Price is paid to Landowner by Company as set forth hereinabove. During the life of the Option, the Landowner maintains the right should Company exercise its option to either 1) lease the property to the Company, or 2) sell the property to the Company.

3. Termination of Option. Company may, at its sole option, terminate this Option Agreement at any time. Any payments made to Landowner before this Option Agreement is terminated shall be Landowner's property and need not be refunded in whole or in part. Landowner may terminate this Option Agreement if Company fails to make any payment required by this Option Agreement and Landowner has provided written notice of such failure to Company and provided thirty (30) days to cure such failure.

4. Exercise of Option. Company may exercise the Option by giving written notice of such exercise to Landowner at any time during the Option Term and delivering to Landowner (Notice of Exercise). At time of Notice of Exercise, Landowner has the right to select to either lease or sell the Property and shall notify the company of Landowners choice within thirty calendar days from receiving the Notice of Exercise subject to the provisions below:

    a. If Company has provided Notice of Exercise and Landowner selects to lease the property, the Company shall deliver to Landowner a Lease Agreement (herein so called) in a form prepared by Company containing the terms set forth on "Exhibit A" attached hereto and made a part hereof and such other matters as are customary and reasonable in solar energy lease and easement agreements. To the extent Landowner has any comments or objections to the Lease Agreement, Landowner shall provide such comments or objections to Company no later than thirty (30) days following receipt of the Lease Agreement, and the Parties shall negotiate in good faith to resolve such comments or objections no later than thirty (30) days following exercise of the Option; provided, however, that Landowner shall have no right to object to the Lease Agreement to the extent the Lease Agreement conforms to the terms of this Option Agreement and contains such other reasonable and customary terms as are typically found in lease and easement agreements in the solar industry. Landowner shall execute and deliver to Company the Lease Agreement promptly upon resolution of the form of same.

    OR

    b. If Company has provided Notice of Exercise and Landowner selects to sell the property, the Company shall deliver to Landowner a Purchase Agreement (herein so called) in a form prepared by Company containing the terms set forth on "Exhibit B" attached hereto and made a part hereof and such other matters as are customary and reasonable in real property purchase and sale agreements. The Option notice shall designate the acreage of the Property that Company wishes to purchase if Company wishes to purchase less than all of the Property. To the extent Landowner has any comments or objections to the Purchase Agreement, Landowner shall provide such comments or objections to Company no later than thirty (30) days following receipt of the Purchase Agreement, and the Parties shall negotiate in good faith to resolve such comments or objections no later than thirty (30) days following exercise of the Option; provided, however, that Landowner shall have no right to object to the Purchase Agreement to the extent the Purchase Agreement conforms to the terms of this Option Agreement and contains such other reasonable and customary terms as are typically found in real estate purchase and sale agreements promulgated by industry groups in the area where the Property is located. Landowner shall execute and deliver to Company the Purchase Agreement promptly upon resolution of the form of same.

5. **Crop Damage**: The Parties anticipate and acknowledge that Landowner may suffer damage to crops, grass, fences, and other property or improvements on the Property during Company's construction, installation, decommissioning, relocation, and maintenance of Solar Facilities. Company shall pay

Landowner for any such losses or damage to the extent such damages are outside the Leased Premises and for the removal of crops inside the Lease Premises as provided below. Except for such losses and damage, Company shall not be responsible for any losses of income, rent, business opportunities, profits or other losses arising out of Landowner's inability to grow crops on or otherwise use the Property. In the event that the commencement of construction begins prior to harvest resulting in Landowner's inability to harvest crops, Company will reimburse Landowner or tenant farmer for the greater of i) all documented costs of preparing the ground and planting, or ii) a sum equal to the product of the number of acres damaged within the Leased Premises, multiplied by the per-acre average market price for such crop in Greensville County,Virginia, as reported by a mutually agreeable reference for pricing (e.g, $/acre from a local grainer for the relevant crop according to the local extension service). Landowner and Company agree to each use reasonable efforts to minimize crop damage.

6. **Net Timbering Value.** The Parties agree that i) the Company shall conduct timbering operations only on land leased or purchased by the Company; and ii) the Company shall have the sole right, power and authority to conduct any timbering operations and all associated stump removal, chipping and removal of all brush and laps created by said timbering operations. The Company shall pay to the Landowner the Net Timbering Value prior to the Commercial Operations Date. The Commercial Operations Date means the date which all testing and commissioning has been completed and is the initiation date to which the seller can start producing electricity for sale. The Net Timbering Value shall mean the value received from the timber less all costs for stump removal, chipping and removal of all brush and laps created by said timbering operations. The Company will not seek payment from Landowner if the Net Timbering Value is negative. The Company shall provide to Landowner all documentation associated with the timbering, stump removal, chipping and removal of all brush and laps including but not limited to contracts, sales receipts, invoices, and bank drafts.

7. **Authority.** Landowner represents and warrants to Company that Landowner is the sole owner of the Property and has the unrestricted right and authority to sign this Option Agreement; to grant Company the rights granted in this Option Agreement; and, to enter into the Lease or Sale as case may be (hereinafter defined) if Company exercises the Option. When signed by the parties, this Option Agreement constitutes a valid and binding agreement enforceable against the Parties in accordance with its terms.

8. **Company's Due Diligence.** During the Option Term, Company or its representatives at Company's sole cost shall have the right of access to the Property for the purpose of installing equipment, making surveys, physical inspections and investigations, including but not limited to solar and environmental studies considered necessary by Company in connection with its proposed use of the Property under the Lease Agreement. Company will provide Landowner with reasonable prior notification of any entry on the Property. Company shall repair or reimburse Landowner for the cost of, any damages to property caused by its entry upon the Property.

9. **Successors and Assigns.** This Option Agreement shall run with the land. Either party may without the consent of the other assign its interest in this Option Agreement. Any assignment shall be

subject to the terms and requirements of this Option Agreement. This Option Agreement shall inure to the benefit of and be binding upon the parties, their heirs, successors, and assigns.

10. **Notices.** All notices or other communications required or permitted by this Option Agreement, shall be in writing and shall be deemed given or made when personally delivered or, in lieu of such personal service, five (5) days after deposit in the United States mail, first class, postage prepaid, certified, or one (1) business day after dispatch by Federal Express or other overnight delivery service of national scope, addressed as set forth in the table set forth hereinabove.

11. **Further Assurances.** Each party agrees to cooperate with the other party and to execute any additional documents reasonably necessary or proper to carry out the provisions and spirit of this Agreement. Without limitation of the foregoing, Landowner agrees to execute and deliver to Company a short form or memorandum of this Option Agreement in a recordable form, which document may be recorded by Company in the real property records of the county in which the Property is located.

SIGNATURES TO FOLLOW ON NEXT PAGE

IN WITNESS WHEREOF, the Parties have executed this Option Agreement as the Effective Date.

Landowners:

By: _____ By: _____

Name: Name:

Company:

SolUnesco, LLC

a Virginia Limited Liability Company

By: _____ 11/30/2016

Name: Francis Hodsoll

Title: Chief Executive Officer

EXHIBIT A

SOLAR LEASE TERM SHEET

The Lease shall grant to Company the Solar Rights and shall contain provisions substantially covering the following terms and provisions:

A. **LEASED PROPERTY**: The real property located in Greensville County, Virginia, generally depicted on Exhibit C-2. The leased area shall be approximately one hundred and eleven acres. The final acreage leased shall be determined by the Company's certified property survey conducted prior to the effective date. The Landowner and Company shall reasonably cooperate in the property survey and creation of a new Deed of Record.

B. **TERM:** The Lease will commence on the effective date which shall occur prior to the groundbreaking for construction activities and ends on the twenty-fifth (25th) anniversary of the "Commercial Operations Date" (the Initial Term). The Commercial Operations Date means the date which all testing and commissioning has been completed and is the initiation date to which the seller can start producing electricity for sale. Company shall have the right to extend the Commercial Operational term an additional ten (10) years.

C. **RENTAL:** Rental during the Initial Term of the Lease will be [redacted] of the Leased Premises under the Lease, [redacted] Rental during the ten-year extension term, if exercised, shall be reasonably agreed upon by the Parties in the final year of the initial term.

D. **TAXES:** Landowner shall pay, when due, all real property taxes and assessments levied against Landowner's Property and all personal property taxes and assessments levied against any property and improvements owned by Landowner and located on Landowner's Property. Company shall pay all personal property taxes and assessments levied against the Solar Facilities when due. If Landowner's Property experiences any increase in the amount of real property taxes assessed as a result of the installation of the Solar Facilities on Landowner's Property, including any reclassification of Landowner's Property, Company will be responsible for paying such increase.

E. **REMOVAL AND RESTORATION:** Within twelve (12) months after the end of the Lease, Company will remove all improvements to a depth of thirty-six (36) inches. During the term of the lease, Company shall post or arrange for the posting of security funds in a manner and amount sufficient to ensure decommissioning of the solar facility and removal of the improvements from the Leased Property consistent with standard industry practices. Upon termination of the Lease for any reason, Company shall promptly thereafter execute and record a release of all of Company's right, title and interest in the Property.

F. **INDEMNITY AND INSURANCE:** Prior to the commencement of construction, Company will indemnify Landowner for injuries and claims for direct damage to the extent caused by Company's exercise of its rights under the Lease backed by general liability insurance with a

combined single limit of [redacted] At the commencement of the construction, the amount will increase to [redacted] Certificates of insurance policies, showing such coverage, shall be delivered to Landowner annually upon request showing.

G. **COOPERATION:** Landowner shall reasonably cooperate in obtaining permits, signing documents requested by Company and its lenders, obtaining signatures of Landowner's tenants and lenders on non-disturbance agreements, and in all other matters relating to Company's proposed activities on the Property.

H. **ASSIGNMENT:** Company has the right to assign, sublease, transfer or convey all or part of its interests in this Lease without Landowner's consent. Company shall provide written notice to Landowner of any such assignment, sublease, transfer, or conveyance. Landowner may assign this Lease to any party in connection with any Transfer of the Leased Property by Landowner; provided, however, that any such Transfer shall be subject to this Lease.

I. **OTHER TERMS AND PROVISIONS:** The Lease shall contain other customary ground lease terms and provisions, including but not limited to provisions relating to non-interference, non-disturbance, quiet enjoyment, condemnation, waiver of any Landlord liens on Company's personal property, lender protection provisions (including but not limited to the right of any Company lender to receive notices of default and additional time to cure defaults and such other customary lender protection provisions), recording of memoranda, delivery of estoppels, further assurances and other reasonable and customary provisions.

EXHIBIT B

SOLAR PURCHASE TERM SHEET

The Purchase Agreement shall contain provisions covering substantially the following terms and provisions:

J. **PURCHASE PRICE**: The purchase price for the Property depicted in Exhibit C-2 a subdivision from two existing parcels shall be [redacted] for the Property purchased as determined by the Company's certified property survey conducted prior to the purchase. The subdivision shall be approximately one hundred and eleven acres. The final acreage purchased shall be determined by the Company's certified property survey conducted prior to the effective date. The Landowner and Company shall reasonably cooperate in the property survey and creation of a new Deed of Record.

K. **EARNEST MONEY**: Company shall deposit with a title company designated by Company (the "Title Company") Earnest Money (herein so called) in the amount of [redacted] no later than three business days following the effective date of the Purchase Agreement. The Earnest Money shall be nonrefundable to Company in any event other than a default by Landowner or failure of any closing condition and shall be credited against the Purchase Price at closing if closing occurs. If Company fails to perform its obligations under the Purchase Agreement at closing, Landowner shall be entitled to retain the Earnest Money (and any Option Price paid) as liquidated damages for Company's default, all other remedies being waived by Landowner.

L. **CLOSING**: Closing shall occur no later than thirty (30) days following the effective date of the Purchase Agreement. At closing, Company shall pay the purchase price, and Landowner shall execute and deliver a general warranty deed and such other documents as are required by the Title Company to issue a title insurance policy to Company covering the Property, which title insurance policy shall be at Company's sole cost and expense. The Parties shall execute a settlement statement prepared by the Title Company. Real estate taxes shall be prorated as of the date of closing.

M. **TITLE AND SURVEY**: Company shall have the right to perform a survey of the Property and to have the Title Company issue a commitment for title insurance covering the Property and to make any objections to title and survey matters in Company's sole discretion. Landowner shall have no obligation to cure any such objections other than those Landowner agrees in writing to cure; provided, however, that Landowner shall cause any liens or judgments affecting the Property to be released at or prior to closing. It shall be a condition of Company's obligation to close that Company be satisfied with the condition of title in Company's sole discretion.

N. **REPRESENTATIONS AND WARRANTIES**. The Purchase Agreement shall contain such representations and warranties as are customary in real estate purchase and sale agreements and in any event shall contain a warranty of title by Landowner and representations of authority by both Company and Landowner.

O. **ASSIGNMENT**: Company shall have the right to assign its interests in the Purchase Agreement without Landowner's consent. Company shall provide written notice to Landowner of any such assignment, sublease, transfer, or conveyance.

Exhibit C-1: Property Description

That certain property depicted below outlined with a blue border and known as Greensville County, Virginia parcels 42-41F and 42-41 and referred to as GPINs: 7337-48-6589 and 7337-57-3290. Based on consultations with the Landowner, the Company has adjusted the boundary line relative to the boundary line provided by Greensville County, Virginia Geographic Information System (GIS). For informational purposes only, the Greensville County GIS measures the property to be 134.5 and 2 acres respectively. The Company's GIS measures the revised boundary to encompass 124 and 1.79 acres.

Exhibit C-2: Parcel Description for Purchase or Lease

That certain property depicted below outlined with an orange border representing subdivisions from 42-41F and 42-41 identified in Exhibit C-1. The area to purchase shall be approximately 111 acres. Landowner and Company shall reasonably cooperate in obtaining survey's and new Deeds for the resulting Property as depicted below.

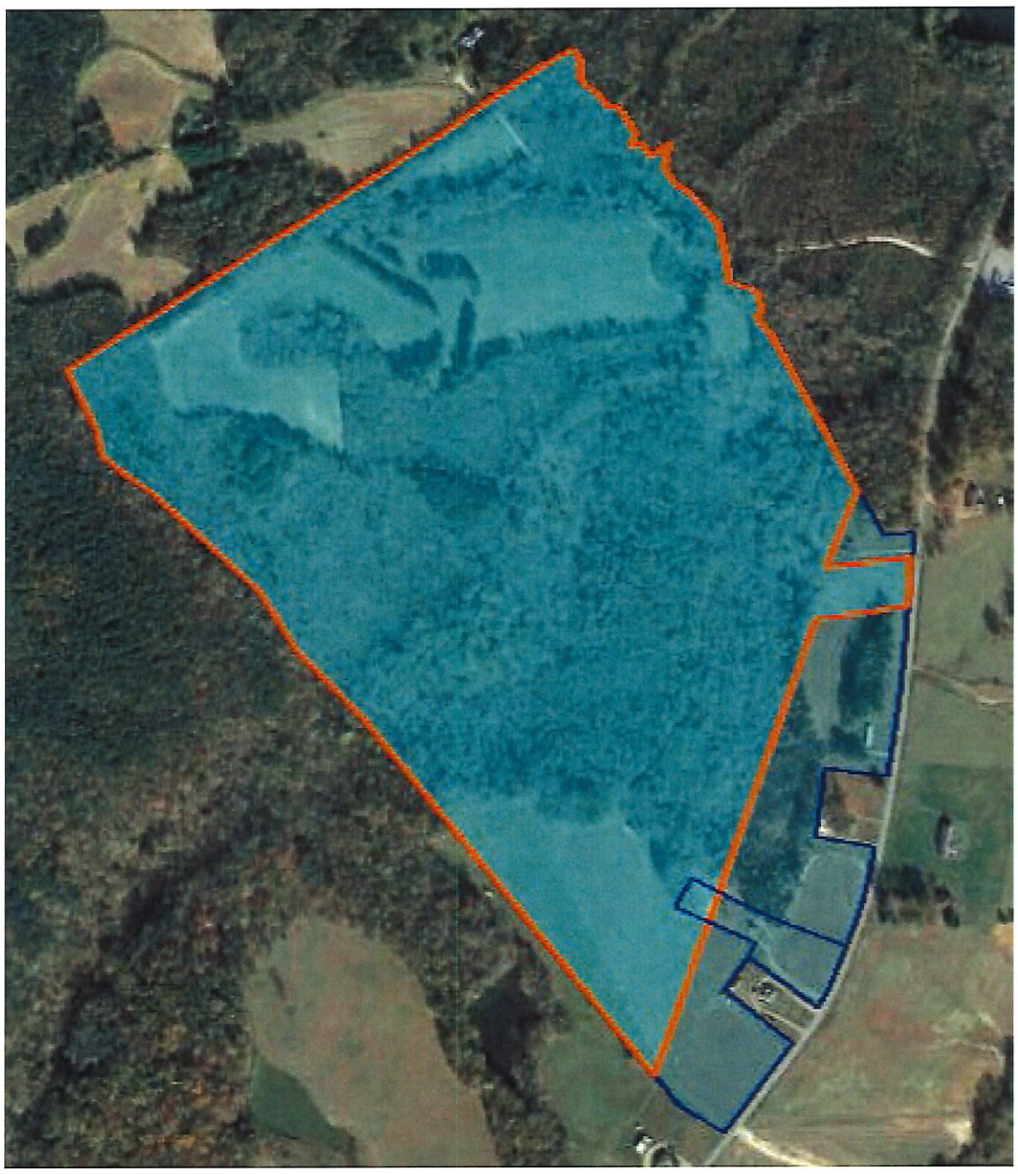


Exhibit C-3: Preliminary Sketch of Solar Array

SolUnesco provides the following initial estimate for informational purposes. The final solar design will be based on the results of site analyses and permitting studies. SolUnesco has estimated that the property identified in Exhibit C-3 could host up to sixty-four (64) acres of solar power generation generally identified by the red boundary in the map below:

FIRST AMENDMENT TO
SOLAR ENERGY OPTION AGREEMENT

This First Amendment to Solar Energy Option Agreement (the "Amendment"), is entered into and made effective as of January 24, 2017 (the "Effective Date"), by and between Dane L. Little and Kellie B. Little (collectively, "Landowner") and SolUnesco LLC (the "Company").

WHEREAS, Landowner and the Company are parties to that certain Solar Energy Option Agreement, effective as of November 23, 2016, (the "Option Agreement");

WHEREAS, Landowner and the Company are mutually agreeable to amending certain provisions of the Option Agreement as set forth herein.

NOW, THEREFORE, for good and valuable consideration received, and intending to be legally bound, the Parties hereby agree as follows:

1. Section 1 of the Option Agreement is hereby amended by inserting the following definition after the definition of "Property":

"Leased Premises"	The entire Property generally depicted on **Exhibit C-2**, or such lesser portion thereof as may be identified by the Company during the Option Term and described in the Lease Agreement delivered to Landowner in accordance with Section 4 of this Option Agreement.

2. The definition of "Solar Rights" in Section 1 of the Option Agreement is hereby amended by adding the words ". including, without limitation, the right for the Company to access the Leased Premises over the rest of the Landowner's Property." after the words "*... together with certain easement and/or leasehold rights for access, utilities and other appurtenant rights to the foregoing*" at the end of the paragraph".

3. Capitalized terms used but not defined in this Amendment shall have the meanings ascribed to them in the Option Agreement.

4. The Option Agreement shall remain in full force and effect in all other respects.

5. The Option Agreement and this Amendment constitute the entire agreement between the Parties regarding the subject matter contained herein.

[SIGNATURES AFFIXED ON NEXT PAGE]

IN WITNESS WHEREOF, the Parties hereto have duly executed and delivered this Amendment as of the Effective Date.

Landowner:

Dane L Little
Dane L Little (Jan 24, 2017)

DANE L. LITTLE

Kellie B Little
Kellie B Little (Jan 24, 2017)

KELLIE B. LITTLE

Company:

SOLUNESCO LLC

By: _____
Name: Francis Hodsoll
Title: Chief Executive Officer

43 K

REAL PROPERTY PURCHASE OPTION AGREEMENT

THIS REAL PROPERTY PURCHASE OPTION AGREEMENT (the "Option Agreement"), is effective as of the Effective Date (hereinafter defined) by and between Landowner (hereinafter defined) and Company (hereinafter defined). Landowner and Company may hereafter be referred to as, together, the "Parties" and each, a "Party".

RECITALS

A. Landowner is the owner of the Property (hereinafter defined).

B. Landowner desires to grant and convey to Company an exclusive option (the "Option") to purchase the Property or a portion thereof.

AGREEMENT

IN CONSIDERATION of the foregoing and other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the Parties hereto agree as follows:

1. **Definitions.** The following terms have the definitions ascribed to such terms in the table below:

Term	Definition
"Effective Date"	August 2, 2016
"Landowner" (and address)	Mr. Willis Driver 5351 Broad Street Road, Louisa ,Virginia 23093
"Company" (and address)	Solunesco, LLC Whose address for notice purposes hereunder is: Contracts Administration 1900 Campus Commons Drive, Suite 100 Reston, VA 20191 phone: (703) 300-8971 email: JHillis@solunesco.com

Term	Definition
"Option Price"	The sum of (i)[redacted] for the first year of the Option Term, being due no later than thirty (30) days following the Effective Date, plus (ii)[redacted] for the second year of the Option Term, being due no later than the first anniversary of the Option Term, plus (iii)[redacted] for the third year of the Option Term, being due no later than the second anniversary of the Option Term, plus (iv) [redacted] for the fourth year of the Option Term, being due no later than the third anniversary of the Option Term, plus (v)[redacted] for the fifth year of the Option Term, being due no later than the fourth anniversary of the Option Term. The sum of the Option Consideration Installments shall be credited towards the Purchase Price at Closing.
"Option Term"	The period commencing on the Effective Date and terminating on the **fifth (5th)** anniversary of the Effective Date. If Company requests an extension, the Parties shall negotiate in good faith for such extension if Company can demonstrate it has diligently pursued and incurred significant costs related to conducting its site specific due diligence for construction of the Solar Facility; applying for and obtaining necessary local land use permits and related approvals; securing project financing; or procuring the Solar Facility Equipment.
"Property"	That certain lot or tract of land located in Greensville County, Virginia described in "**Exhibit B**" attached hereto and made a part hereof for all purposes.

2. **Grant of Option.** Landowner grants Company an exclusive, irrevocable Option to purchase the Property, which Option shall be in effect during the Option Term for so long as the Option Price is paid to Landowner by Company as set forth hereinabove.

3. **Termination of Option.** Company may, at its sole option, terminate this Option Agreement at any time. Any payments made to Landowner before this Option Agreement is terminated shall be Landowner's property and need not be refunded in whole or in part. Landowner may terminate this Option Agreement if Company fails to make any payment required by this Option Agreement and Landowner has provided written notice of such failure to Company and provided thirty (30) days to cure such failure.

4. **Exercise of Option.** Company may exercise the Option by giving written notice of such exercise to Landowner at any time during the Option Term and delivering to Landowner a Purchase Agreement (herein so called) in a form prepared by Company containing the terms set forth on **"Exhibit A"** attached hereto and made a part hereof and such other matters as are customary and reasonable in real property purchase and sale agreements. The Option notice shall designate the acreage of the Property that Company wishes to purchase if Company wishes to purchase less than all of the

Property. To the extent Landowner has any comments or objections to the Purchase Agreement, Landowner shall provide such comments or objections to Company no later than thirty (30) days following receipt of the Purchase Agreement, and the Parties shall negotiate in good faith to resolve such comments or objections no later than thirty (30) days following exercise of the Option; provided, however, that Landowner shall have no right to object to the Purchase Agreement to the extent the Purchase Agreement conforms to the terms of this Option Agreement and contains such other reasonable and customary terms as are typically found in real estate purchase and sale agreements promulgated by industry groups in the area where the Property is located. Landowner shall execute and deliver to Company the Purchase Agreement promptly upon resolution of the form of same.

5. **Crop Damage**: The Parties anticipate and acknowledge that Landowner may suffer damage to crops on the Property during Company's construction, installation, decommissioning, relocation, and maintenance of Solar Facilities. Company shall pay Landowner for the removal of crops inside the Purchased property as provided below. Except for such losses and damage, Company shall not be responsible for any losses of income, rent, business opportunities, profits or other losses arising out of Landowner's inability to grow crops on or otherwise use the Property. In the event that the commencement of construction begins prior to harvest resulting in Landowner's inability to harvest crops, Company will reimburse Landowner or tenant farmer for the greater of i) all documented costs of preparing the ground and planting, or ii) a sum equal to the product of the number of acres damaged within the Leased Premises, multiplied by the per-acre average market price for such crop in Greensville County, as reported by a mutually agreeable reference for pricing (e.g, $/acre from a local grainer for the relevant crop according to the local extension service), subject to a pro rata adjustment for the portion of the growing period completed (e.g., for a 110 day growing period and Company occupancy occurs on the 55th day, the percentage is 50%). Landowner and Company agree to each use reasonable efforts to minimize crop damage.

6. **Timbering and Clearing**. The landowner reserves all merchantable timber and agrees to clear cut said timber including 1) the chipping and removal of all brush and laps, and 2) providing for the removal of the stumps created by said timbering operations. If Landowner timbers, Landowner agrees to provide for fifty percent (50%) of the stump removal costs provided that the landowner's share of stump removal costs does not exceed seventy-five percent (75%) of the net timbering value prior to accounting for stump removal costs. For avoidance of doubt, "net timbering value prior to accounting for stump removal costs" shall equal the value of the timber less the costs associated with timbering operations, chipping, and the removal of all brush and laps. Company and Landowner agree to cooperate to minimize the costs of stump removal. Company retains the right to hire or manage contractors conducting any of the activities associated with stump removal, clearing and site preparation services such as grading. Landowner agrees to conclude all timbering, clearing, and stump removal operations within ninety days from the Exercise of the Option. For the avoidance of doubt, the landowner may timber at any time during the term of this option. Company will provide to the landowner reasonable notice of project status to facilitate planning for timbering operations.

7. **Authority.** Landowner represents and warrants to Company that Landowner is the sole owner of the Property and has the unrestricted right and authority to sign this Option Agreement; to grant Company the rights granted in this Option Agreement; and, to enter into the Purchase Agreement if Company exercises the Option. When signed by the parties, this Option Agreement constitutes a valid and binding agreement enforceable against the Parties in accordance with its terms.

8. **Company's Due Diligence.** During the Option Term, Company or its representatives at Company's sole cost shall have the right of access to the Property for the purpose of installing equipment, making surveys, physical inspections and investigations, including but not limited to solar and environmental studies considered necessary by Company in connection with its proposed use of the Property. Company will provide Landowner with reasonable prior notification of any entry on the Property. Company shall repair or reimburse Landowner for the cost of, any damages to property caused by its entry upon the Property.

9. **Successors and Assigns.** This Option Agreement shall run with the land. Either Party may without the consent of the other assign its interest in this Option Agreement. Any assignment shall be subject to the terms and requirements of this Option Agreement. This Option Agreement shall inure to the benefit of and be binding upon the parties, their heirs, successors and assigns. If Company assigns this agreement the assignment shall be for the purpose to capture the unobstructed flow of all radiant energy emitted from the sun upon, over and across the Premises or any portion of the Premises for electric power, heat and/or steam generation purposes, including the right to construct, operate and maintain solar energy conversion systems, including, without exclusion, solar photovoltaic panels (including concentrating solar photovoltaic equipment), batteries and/or other energy storage devices, solar resource measurement equipment, support structures, foundations, pads, footings, fencing, electrical inverters and transformers, meters, switches, breakers, fixtures, equipment storage, electric wiring, distribution and transmission lines, access roads, interconnection facilities and related structures and facilities and equipment, together with certain easement and/or leasehold rights for access, utilities and other appurtenant rights to the foregoing.

10. **Notices.** All notices or other communications required or permitted by this Option Agreement, shall be in writing and shall be deemed given or made when personally delivered or, in lieu of such personal service, five (5) days after deposit in the United States mail, first class, postage prepaid, certified, or one (1) business day after dispatch by Federal Express or other overnight delivery service of national scope, addressed as set forth in the table set forth hereinabove.

11. **Further Assurances.** Each Party agrees to cooperate with the other Party and to execute any additional documents reasonably necessary or proper to carry out the provisions and spirit of this Agreement. Without limitation of the foregoing, Landowner agrees to execute and deliver to Company a short form or memorandum of this Option Agreement in a recordable form, which document may be recorded by Company in the real property records of the county in which the Property is located.

SIGNATURES TO FOLLOW ON NEXT PAGE

IN WITNESS WHEREOF, the Parties have executed this Option Agreement as the Effective Date.

Willis Driver:

By: _____

Name:

Company:

SolUnesco, LLC

a Virginia Limited Liability Company

By: _____

Name: Francis Hodsoll

Title: Chief Executive Officer

EXHIBIT A

SOLAR PURCHASE TERM SHEET

The Purchase Agreement shall contain provisions covering substantially the following terms and provisions:

A. **PURCHASE PRICE:** The purchase price shall be [redacted] less the sum of the Option payments made by Company to Landowner for the property in Exhibit B.

B. **EARNEST MONEY:** Company shall deposit with a title company designated by Company (the "Title Company") Earnest Money (herein so called) in the amount of [redacted] no later than three business days following the effective date of the Purchase Agreement. The Earnest Money shall be nonrefundable to Company in any event other than a default by Landowner or failure of any closing condition and shall be credited against the Purchase Price at closing if closing occurs. If Company fails to perform its obligations under the Purchase Agreement at closing, Landowner shall be entitled to retain the Earnest Money (and any Option Price paid) as liquidated damages for Company's default, all other remedies being waived by Landowner.

C. **CLOSING:** Closing shall occur no later than thirty (30) days following the effective date of the Purchase Agreement. At closing, Company shall pay the purchase price, and Landowner shall execute and deliver a general warranty deed and such other documents as are required by the Title Company to issue a title insurance policy to Company covering the Property, which title insurance policy shall be at Company's sole cost and expense. The Parties shall execute a settlement statement prepared by the Title Company. Real estate taxes shall be prorated as of the date of closing.

D. **TITLE AND SURVEY:** Company shall have the right to perform a survey of the Property and to have the Title Company issue a commitment for title insurance covering the Property and to make any objections to title and survey matters in Company's sole discretion. Landowner shall have no obligation to cure any such objections other than those Landowner agrees in writing to cure; provided, however, that Landowner shall cause any liens or judgments affecting the Property to be released at or prior to closing. It shall be a condition of Company's obligation to close that Company be satisfied with the condition of title in Company's sole discretion.

E. **REPRESENTATIONS AND WARRANTIES.** The Purchase Agreement shall contain such representations and warranties as are customary in real estate purchase and sale agreements and in any event shall contain a warranty of title by Landowner and representations of authority by both Company and Landowner.

F. **ASSIGNMENT:** Company shall have the right to assign its interests in the Purchase Agreement without Landowner's consent. Company shall provide written notice to Landowner of any such assignment, sublease, transfer, or conveyance.

GPIN: 7338-50-7623

EXHIBIT B

PROPERTY 42-55

That certain property known as Greensville Parcel 42.55 (also known as Parcel 3-W) located at State Hwy 633 (Pine Log Road) Skippers, Virginia.

For informational purposes only, the Greensville County, Virginia Geographic Information System measures the property to be fifty-six and 60/100s (56.6) acres.

TRANSMISSION EASEMENT OPTION AGREEMENT

THIS TRANSMISSION EASEMENT OPTION AGREEMENT (the "Option Agreement"), is effective as of the Effective Date (hereinafter defined) by and between Landowner (hereinafter defined) and Company (hereinafter defined). Landowner and Company may hereafter be referred to as, together, the "Parties" and each, a "Party".

RECITALS

A. Landowner is the owner of the Property (hereinafter defined).

B. Landowner desires to grant and convey to Company an exclusive option (the "Option") to acquire the Easements (hereinafter defined) on a portion of the Property and grant certain other rights relating to the Property (hereinafter defined).

AGREEMENT

IN CONSIDERATION of the foregoing and other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the Parties hereto agree as follows:

1. DEFINITIONS. The following terms have the definitions ascribed to such terms in the table below:

Term	**Definition**
"EFFECTIVE DATE"	November 23, 2016
"LANDOWNER" (and address)	Haywood D. Jones and Martha E. Jones 1058 Pine Log Rd., Skippers, VA 23879
"COMPANY" (and address)	Solunesco, LLC Whose address for notice purposes hereunder is: Contracts Administration 1900 Campus Commons Drive, Suite 100 Reston, VA 20191 phone: (703) 300-8971 email: Info@solunesco.com
"OPTION PRICE"	The sum of (i) [redacted] for the first year of the Option Term, being due no later than thirty (30) days following the Effective Date, plus (ii) [redacted] for the second year of the Option Term, being due no later than the first anniversary of the Option Term, plus (iii) [redacted] for the third year of the Option Term, being due no later than the second anniversary of the Option Term, plus (iv) [redacted] for the fourth year of the Option Term, being due no later than the third anniversary of the Option Term, plus (v) [redacted] for the fifth year of the Option Term, being due no later than the fourth anniversary of the Option Term.

Term	Definition
"OPTION TERM"	The period commencing on the Effective Date and terminating on the fifth (5th) anniversary of the Effective Date. If Company requests an extension, the Parties shall negotiate in good faith for such extension if Company can demonstrate it has diligently pursued and incurred significant costs related to conducting its site specific due diligence for construction of the Solar Facility; applying for and obtaining necessary local land use permits and related approvals; securing project financing; or procuring the Solar Facility Equipment.
"PROPERTY"	The real property located in Greensville, Virginia described in "Exhibit B-1" attached hereto and made a part hereof for all purposes.
"EASEMENT AREA"	Defined in "Exhibit A," the Transmission Easement Term Sheet and described in "Exhibit B-2."

2. GRANT OF OPTION. Landowner grants Company an exclusive, irrevocable Option to acquire the Transmission Easement, which Option shall be in effect during the Option Term for so long as the Option Price is paid to Landowner by Company as set forth hereinabove.

3. TERMINATION OF OPTION. Company may, at its sole option, terminate this Option Agreement at any time. Any payments made to Landowner before this Option Agreement is terminated shall be Landowner's property and need not be refunded in whole or in part. Landowner may terminate this Option Agreement if Company fails to make any payment required by this Option Agreement and Landowner has provided written notice of such failure to Company and provided thirty (30) days to cure such failure.

4. EXERCISE OF OPTION. Company may exercise the Option by giving written notice of such exercise to Landowner at any time during the Option Term and delivering to Landowner a Transmission Easement Agreement (herein so called) in a form prepared by Company. Company and Landowner agree that the Transmission Easement Agreement shall contain the terms set forth on "**Exhibit A**" attached hereto and made a part hereof and shall contain such other matters as are customary and reasonable in solar energy transmission easements agreements. Company shall provide a minimum of sixty (60) days' notice prior to the exercise of the option. To the extent Landowner has any comments or objections to the Transmission Easement Agreement, Landowner shall provide such comments or objections to Company no later than thirty (30) days following receipt of the Transmission Easement Agreement, and the Parties shall negotiate in good faith to resolve such comments or objections no later than thirty (30) days following exercise of the Option; provided, however, that Landowner shall have no right to object to the Transmission Easement Agreement to the extent the Transmission Easement Agreement conforms to the terms of this Option Agreement and contains such other reasonable and customary terms as are typically found in transmission easements agreements in the solar industry. Landowner shall execute and deliver to Company the Transmission Easement Agreement promptly upon resolution of the form of same.

5. AUTHORITY. Landowner represents and warrants to Company that Landowner is the sole owner of the Property and has the unrestricted right and authority to sign this Option Agreement; to grant Company the rights granted in this Option Agreement; and, to enter into the Transmission Easement Agreement if Company exercises the Option. When signed by the parties, this Option Agreement constitutes a valid and binding agreement enforceable against the Parties in accordance with its terms.

6. COMPANY'S DUE DILIGENCE. During the Option Term, Company or its representatives at Company's sole cost shall have the right of access to the Property for the purpose of installing equipment, making surveys, physical inspections and investigations, including but not limited to solar and environmental studies considered necessary by Company in connection with its proposed use of the Property under the Transmission Easement Agreement. Company will provide Landowner with reasonable prior notification of any entry on the Property. Company shall repair or reimburse Landowner for the cost of, any damages to property caused by its entry upon the Property. In the event Company requires that any merchantable timber be cleared from the Property in connection with the exercise of its rights hereunder, Company shall first give written notice to Landowner and afford Landowner at least thirty (30) days in which to clear said timber. If Landowner fails to clear the timber within the thirty (30) day period, Company will have the right clear same but shall use commercially reasonable efforts to leave the cut timber on the Property for Landowner's benefit, and Landowner will have all rights to the cut timber.

7. SUCCESSORS AND ASSIGNS. This Option Agreement shall run with the land. Either Party may without the consent of the other assign its interest in this Option Agreement. Any assignment shall be subject to the terms and requirements of this Option Agreement. This Option Agreement shall inure to the benefit of and be binding upon the parties, their heirs, successors and assigns.

8. NOTICES. All notices or other communications required or permitted by this Option Agreement, shall be in writing and shall be deemed given or made when personally delivered or, in lieu of such personal service, five (5) days after deposit in the United States mail, first class, postage prepaid, certified, or one (1) business day after dispatch by Federal Express or other overnight delivery service of national scope, addressed as set forth in the table set forth hereinabove.

9. FURTHER ASSURANCES. Each party agrees to cooperate with the other party and to execute any additional documents reasonably necessary or proper to carry out the provisions and spirit of this Agreement. Without limitation of the foregoing, Landowner agrees to execute and deliver to Company a short form or memorandum of this Option Agreement in a recordable form, which document may be recorded by Company in the real property records of the county in which the Property is located.

SIGNATURES TO FOLLOW ON NEXT PAGE

IN WITNESS WHEREOF, the Parties have executed this Option Agreement as the Effective Date.

Landowners:

By: Haywood D Jones

Name: Haywood D Jones 11-22-16

By: Martha E Jones

Name: Martha E Jones 11-22-16

Company:

SolUnesco, LLC

a Virginia Limited Liability Company

By:

Name: Francis Hodsoll

Title: Chief Executive Officer

EXHIBIT A

TRANSMISSION EASEMENT TERM SHEET

The Transmission Easement shall contain provisions covering substantially the following terms and provisions:

A. EASEMENT AREA: A strip of land on the Property being one hundred fifty feet (150') wide, running approximately four sixty-four hundred feet (464') on either side of a center line of the Transmission Facilities (hereinafter defined) after same are installed, a preliminary sketch of said Easement Area being attached hereto as Exhibit "B-2."

B. GRANT: Landowner does hereby grant Company an exclusive, perpetual easement (the "Transmission Easement") on, in, along, across and under the Easement Area, for the purposes of constructing, operating and maintaining transmission facilities, including without limitation, overhead and underground transmission lines, cables, foundations and related equipment. Any underground power lines and/or fiber optic cable shall be below plow depth. The Easements include all of the rights and privileges necessary and incidental to the full use and enjoyment of the Easements for the purposes permitted in this Easement Agreement.

C. PAYMENT: The Transmission Easement payment shall be [redacted]

D. NO INTERFERENCE: Landowner shall not construct, install, or permit to be constructed or installed any improvements of any type whatsoever which would inhibit or impair any of Company's rights or benefits as set forth in this Easement Agreement. Landowner shall not grant or permit any person or persons, other than Company, any right-of-way, encumbrance, easement or other right or interest in, to or affecting the Easement Area, without the prior written consent of Company in each instance, which consent Company may grant, withhold or deny in its sole discretion.

E. TAXES: Landowner shall pay, when due, all real property taxes and assessments levied against Landowner's Property and all personal property taxes and assessments levied against any property and improvements owned by Landowner and located on Landowner's Property. Company shall pay all personal property taxes and assessments levied against the Solar Facilities when due. If Landowner's Property experiences any increase in the amount of real property taxes assessed as a result of the installation of the transmission Facilities on Landowner's Property, including any reclassification of Landowner's Property, Company will be responsible for paying such increase.

F. REMOVAL AND RESTORATION: Within twelve (12) months after the expiration, surrender or termination of this Transmission Easement Agreement, Company remove all improvements to a depth of thirty-six (36) inches owned, installed or constructed by Company thereon, except for roads, and Company shall have a continuing easement to enter the Property for such purpose during such twelve (12) month period.

G. INDEMNITY AND INSURANCE: Prior to the commencement of construction, Company will indemnify Landowner for injuries and claims for direct damage to the extent caused by Company's exercise of its rights under the easements backed by general liability insurance with a combined single limit of [redacted] At the commencement of the construction, the amount will increase to [redacted]

Certificates of insurance policies showing shall be delivered to Landowner annually upon request showing such coverage.

H. ASSIGNMENT: Company shall have the right to sell, convey, lease, transfer or assign all or any portion of the Easements, this Easement Agreement or the Transmission Facilities, or to apportion, grant sub-easements co-easements, separate easements, leases, licenses or similar rights, however denominated, to one or more persons or entities (collectively "Assignees"). Landowner may assign this Easements to any party in connection with any Transfer of the Property by Landowner; provided, however, that any such Transfer shall be subject to this Transmission Easement.

I. COOPERATION: Landowner shall reasonably cooperate in obtaining permits, signing documents requested by Company and its lenders, obtaining signatures of Landowner's tenants and lenders on non-disturbance agreements, and in all other matters relating to Company's proposed activities on the Property.

J. DEFAULT. If Company fails to perform its obligations hereunder (an "Event of Default"), then it shall not be in default hereunder unless it fails to cure such Event of Default within sixty (60) days after receiving written notice from Landowner stating with particularity the nature and extent of such Event of Default and specifying the method of cure (a "Notice of Default"); provided, however, that if the nature or extent of the obligation or obligations is such that more than sixty (60) days are required, in the exercise of commercially reasonable diligence, for performance of such obligations(s), then Company shall not be in default if it commences such performance with such sixty (60) day period and thereafter pursues the same to completion with commercially reasonable diligence.

K. OTHER TERMS AND PROVISIONS: The easements shall contain other customary terms and provisions, including but not limited to provisions relating to non-interference, non-disturbance, quiet enjoyment, condemnation, waiver of any Landlord liens on Company's personal property, lender protection provisions (including but not limited to the right of any Company lender to receive notices of default and additional time to cure defaults and such other customary lender protection provisions), recording of memoranda, delivery of estoppels, further assurances and other reasonable and customary provisions.

EXHIBIT B-1

PROPERTY

That certain property known as Greensville County Virginia Parcel 42B-4-12 (also known within the Greensville GIS system as GPIN: 7337-69-4508) located on Pine Log Road, and totaling approximately one and seventy-nine/100s (1.79) acres.

EXHIBIT B-2

Preliminary Sketch of Easement Area

The rectangular area bounded with a red line and yellow highlight provided a preliminary sketch of the Easement Area. This area is one hundred feet (100') wide and approximately four hundred and sixty-four feet (464') long.

FIRST AMENDMENT TO
TRANSMISSION EASEMENT OPTION AGREEMENT

This First Amendment to Transmission Easement Option Agreement (the "Amendment"), is entered into and made effective as of February 17, 2017 (the "Effective Date"), by and between Haywood D. Jones and Martha E. Jones (collectively, "Landowner") and SolUnesco LLC (the "Company").

WHEREAS, Landowner and the Company are parties to that certain Transmission Easement Option Agreement, effective as of November 23, 2016, (the "Option Agreement");

WHEREAS, Landowner and the Company are mutually agreeable to amending certain provisions of the Option Agreement as set forth herein.

NOW, THEREFORE, for good and valuable consideration received, and intending to be legally bound, the Parties hereby agree as follows:

1. Section B of the Recitals is hereby amended by deleting the word "Easements" and replacing it with the words "Transmission Easement".

2. Section 1 of the Option Agreement is hereby amended by inserting the following definition of "TRANSMISSION EASEMENT" after the definition of "PROPERTY":

"TRANSMISSION EASEMENT"	The perpetual, exclusive deed of easement for an electric utility corridor encumbering the Property as defined in Section B of "Exhibit A" attached hereto and made part hereof for all purposes.

3. Section 1 of the Option Agreement is hereby amended by deleting the definition of "EASEMENT AREA" in its entirety and replacing it with the following definition:

"EASEMENT AREA"	The area(s) of the Property to be conveyed to Company in the Transmission Easement as described in Section A of "Exhibit A" attached hereto and made part hereof for all purposes.

4. The Option Agreement is hereby amended by adding the following Section 10:

   "10. EXCLUSIVITY OF OPTION. Landowner shall not enter into any agreement or option with any third party to lease, use or occupy the Property or to acquire any easement or right-of-way on the Property prior to the expiration or termination of this Option Agreement."

5. "Exhibit A" of the Option Agreement shall be amended by adding the word "Agreement" after the words "Transmission Easement" in the introductory paragraph.

6. Section A of "Exhibit A" of the Option Agreement is hereby deleted in its entirety and replaced with the following:

"EASEMENT AREA: The Easement Area shall be a strip of land on the Property, to be determined by the Parties, which shall be one hundred feet (100') wide and approximately four hundred sixty-four feet (464') long, and shall extend fifty feet (50') on each side of a center line of the Transmission Facilities (hereinafter defined) after same are installed; a preliminary sketch of the Easement Area is attached hereto as "Exhibit B-2"."

7. Section B of "Exhibit A" of the Option Agreement is hereby deleted in its entirety and replaced with the following:

"GRANT OF TRANSMISSION EASEMENT. Landowner does hereby grant to Company an exclusive, perpetual easement on, in, along, across and under the Easement Area for the purposes of constructing, operating and maintaining electric transmission wires, lines, cables, foundations, poles, towers, conduits and related equipment (the "**Transmission Facilities**") (the "**Transmission Easement**"), Any underground power lines and/or fiber optic cables shall be below plow depth. The Transmission Easement includes all of the rights, appurtenances and privileges necessary and incidental to the full use of the Easement Area for the purposes permitted in the Transmission Easement Agreement, including the right for ingress and egress over the Property outside the Easement Area."

8. Section E of "Exhibit A" of the Option Agreement is hereby amended by deleting the words "Solar Facilities" and replacing them with "Transmission Facilities" and by deleting the words "transmission Facilities" and replacing them with "Transmission Facilities".

9. Section F of "Exhibit A" of the Option Agreement is hereby amended by deleting the word "expiration" on the first line of the section.

10. Sections G and K of "Exhibit A" of the Option Agreement are hereby amended by deleting the word "easements" wherever it appears in such sections and replacing it with the words "Transmission Easement".

11. Section H of "Exhibit A" of the Option Agreement is hereby deleted in its entirety and replaced with the following:

"ASSIGNMENT: Company shall have the right to sell, convey, lease, transfer or assign all or any portion of the Transmission Easement, this Easement Agreement or the Transmission Facilities, or to apportion, grant sub-easements co-easements, separate easements, leases, licenses or similar rights, however denominated, to one or more persons or entities (collectively "Assignees"). Landowner may assign this Easement Agreement to any party in connection with any transfer of the Property by Landowner; provided, however, that any such transfer shall be subject to this Transmission Easement."

12. Capitalized terms used but not defined in this Amendment shall have the meanings ascribed to them in the Option Agreement.

13. The Option Agreement shall remain in full force and effect in all other respects.

14. The Option Agreement and this Amendment constitute the entire agreement between the Parties regarding the subject matter contained herein.

[SIGNATURES AFFIXED ON NEXT PAGE]

IN WITNESS WHEREOF, the Parties hereto have duly executed and delivered this Amendment as of the Effective Date.

Landowner:

Haywood D. Jones
HAYWOOD D. JONES

Martha E. Jones
MARTHA E. JONES

DORENE S. CARR
NOTARY
PUBLIC
HALIFAX COUNTY, N.C.

Dorene S. Carr

Company:

SOLUNESCO LLC

By: F Hodsoll
Name: Francis Hodsoll
Title: Chief Executive Officer

REAL PROPERTY PURCHASE AND ELECTRICAL CONNECTION EASEMENT OPTION AGREEMENT

THIS REAL PROPERTY PURCHASE AND ELECTRICAL CONNECTION EASEMENT OPTION AGREEMENT (the "Option Agreement"), is made and entered into effective as of January 25, 2018, by and between James S. Ferguson, Sheila B. Ferguson and James Ferguson, Sr. (collectively "Landowner") and Meherrin Solar LLC ("Company"). Landowner and Company may hereafter be referred to as, together, the "Parties" and each, a "Party".

RECITALS

A. Landowner is the owner of the Property (hereinafter defined).

B. Landowner desires to grant and convey to Company:

(i) an exclusive option to purchase the Solar Property (hereinafter defined); and

(ii) an exclusive option to acquire the Electrical Connection Easement (hereinafter defined) on a portion of the Outside Property (hereinafter defined).

AGREEMENT

IN CONSIDERATION of the foregoing and other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the Parties hereby agree as follows:

1. **Definitions**. The following terms have the definitions ascribed to such terms in the table below:

Term	Definition
"Company" (and address)	Meherrin Solar LLC c/o SolUnesco, LLC, as agent for Meherrin Solar LLC 200 Donald Lynch Blvd., Suite 300 Marlborough, Massachusetts 01752 phone: (703) 300-8971 email: Info@solunesco.com
"Company Right of Way"	Right-of-way, encumbrance, easement or other right or interest in, to those portions of the Outside Property to be mutually identified by Landowner and Company during the Option Term to enable Company to have access at all times to the Solar Property and the Easement Area.
"Easement Area"	The area(s) of the Outside Property to be conveyed to Company in the Electrical Connection Easement as described in Section A of **"Exhibit B"** attached hereto and made part hereof for all purposes.
"Effective Date"	January 25, 2018

"Electrical Connection Assets"	Electric wires, lines, cables, conduits, poles (if applicable) and related equipment.
"Electrical Connection Easement"	The perpetual, exclusive deed of easement for an electrical connection corridor encumbering the Outside Property, as defined in Section B of "Exhibit B" attached hereto and made part hereof for all purposes.
"Landowner" (and address)	James S. Ferguson, Sr. 1570 Brink Road, Emporia VA 23847 Sheila B. Ferguson 1570 Brink Road, Emporia VA 23847 James Ferguson, Jr. 1091 Brink Road, Emporia VA 23847
"Landowner Right of Way"	Right-of-way, encumbrance, easement or other right or interest in, to those portions of the Solar Property to be mutually identified by Landowner and Company during the Option Term to enable Landowner and other stakeholders to have access to the landlocked parcels abutting the Solar Property, including the fields identified in "Exhibit D" attached hereto as "Required Landowner Access".
"Option"	Collectively, the Purchase Option and the Easement Option.
"Option Agreement"	Has the meaning set forth in the introductory clause hereinabove, and includes the Recitals and the Schedules attached hereto, all of which form an integral part of this Option Agreement for all purposes.
"Option Price"	The sum of (i) [redacted] for the first year of the Option Term (hereinafter defined), being due no later than thirty (30) days following the Effective Date, plus (ii) [redacted] for the second year of the Option Term, being due no later than the first anniversary of the Effective Date, plus (iii) [redacted] for the third year of the Option Term, being due no later than the second anniversary of the Effective Date. The sum of any Option Price payment shall be credited towards the Purchase Price (as defined in Section A of "**Exhibit A**").

"Option Term"	The period commencing on the Effective Date and terminating on the **third (3rd)** anniversary of the Effective Date. If Company requests an extension, the Parties shall negotiate in good faith for such extension if Company can reasonably demonstrate it has diligently pursued and incurred significant costs related to conducting its site specific due diligence for the construction of Solar Facilities (hereinafter defined); applying for and obtaining necessary local land use permits and related approvals; securing project financing; or procuring applicable Solar Facility equipment.
"Outside Property"	The portion of the Property that is not covered by the Solar Property or the Easement Area, including the specific areas as identified in "**Exhibit D**" and labeled "Excluded Areas".
"Property"	The real property located in Greensville County, Virginia described in "**Exhibit C**" attached hereto and made a part hereof for all purposes.
"Purchase Option"	Has the meaning set forth in Section 2.a. hereinbelow.
"Solar Facilities"	Any and all solar energy conversion systems, including, without exclusion, solar photovoltaic panels (including concentrating solar photovoltaic equipment), batteries and/or other energy storage devices, solar resource measurement equipment, support structures, foundations, pads, footings, fencing, electrical inverters and transformers, meters, switches, breakers, fixtures, equipment storage, electric wiring, distribution and transmission lines, access roads, interconnection facilities and related structures and facilities and equipment, to capture the flow of all radiant energy emitted from the sun for electric power, heat or stream generation purposes or otherwise.
"Solar Property"	That portion of the Property to be mutually identified by Landowner and Company during the Option Term, to be purchased by Company pursuant to the Purchase Agreement. The Solar Property shall include the Useable Property and shall extend to such boundaries of the Property so to preclude any Outside Property from being landlocked, without access for the Landowner. For greater certainty, it is understood that the Solar Property does not include the Outside Property. A preliminary description of the Solar Property is provided in "**Exhibit D**" attached hereto and made part hereof for all purposes.
"Useable Property"	That portion of the Solar Property to be mutually identified by Landowner and Company during the Option Term and on which Company intends to construct Solar Facilities. A preliminary description of the Useable Property is provided in "**Exhibit D**" attached hereto and made part hereof for all purposes

2. **Option Terms & Payment.**

   a. Landowner hereby grants and conveys to Company:

i. an exclusive, irrevocable option to purchase the Solar Property from Landowner, subject to the terms and conditions contained in this Option Agreement (the "Purchase Option"); and

ii. an exclusive, irrevocable option to acquire the Electrical Connection Easement from Landowner, subject to the terms and conditions contained in this Option Agreement (the "Easement Option"); and

iii. the Company Right of Way.

b. If, Company exercises the Purchase Option, the Company hereby grants and conveys to the Landowner the Landowner Right of Way.

c. The Option shall be in effect during the Option Term, subject to Landowner's right to terminate this Option Agreement as set forth in Section 3.

d. As consideration for the Option, Company shall pay to Landowner the Option Price.

3. **Termination of Option**. Company may, at its sole option, terminate this Option Agreement at any time upon written notice to Landowner. Any payments made to Landowner before this Option Agreement is terminated shall be Landowner's property and need not be refunded in whole or in part. Landowner may terminate this Option Agreement by written notice to Company if Company fails to make any payment required by this Option Agreement and Landowner has provided written notice of such failure to Company and provided thirty (30) days to cure such failure.

4. **Exercise of Option.** Company may exercise the Option by (i) providing written notice of such exercise to Landowner at any time during the Option Term and (ii) delivering to Landowner a Purchase Agreement and an Easement Agreement (herein so called) in forms prepared by Company containing the terms set forth on **"Exhibit A"** and **"Exhibit B"**, respectively, attached hereto and made a part hereof and such other matters as are customary and reasonable in real property purchase and sale agreements and in solar energy easement agreements. Company shall provide a minimum of sixty (60) days' notice prior to the exercise of the Option and Company and Landowner shall work in good faith to negotiate the final terms of the Purchase Agreement and the Easement Agreement within thirty (30) days of Landowner's receipt of the forms of Purchase Agreement and Easement Agreement from Company. Landowner shall have no right to object to the Purchase Agreement and the Easement Agreement to the extent such agreements conform to the terms of this Option Agreement and contains such other reasonable and customary terms as are typically found in real estate purchase and sale agreements promulgated by industry groups in the area where the Property is located and in electrical connection or similar easement agreements in the solar industry. Landowner shall execute and deliver to Company the Purchase Agreement and the Easement Agreement promptly upon resolution of the form of same.

5. **Timbering**. If Company exercises the Option, Landowner shall conduct all timbering operations on the Solar Property and the Easement Area (the "Timbering Operations"). Landowner shall cooperate with Company and its requests for timbering and shall ensure to use all commercially reasonable measures to conform to Company's construction of the Solar Facilities on the Solar Property and of the Electrical Connection Assets in or on the Easement Area. Company shall

provide Landowner with a request for Timbering Operations at least ninety (90) days prior to the requested timbering start date (the "Timbering Request").

If Landowner (i) fails to start the Timbering Operations on the timbering start date set forth in the Timbering Request or suspends the Timbering Operations, in each case without justifiable cause, or (ii) refuses to conduct any Timbering Operations, then: the Parties agree that Company will have the right to conduct such Timbering Operations.

6. **Agricultural Activities.** Landowner shall have the right to conduct farming and other agricultural activities on the Solar Property and the Easement Area during the Option Term.

7. **Landowner Disturbances.** Other than the agricultural activities described in Section 6, Landowner shall not disturb the Solar Property or the Easement Area in any form during the Option Term without the express written consent of Company.

8. **Authority**. Landowner represents and warrants to Company that Landowner is the sole owner of the Property and has the unrestricted right and authority: to sign this Option Agreement; to grant Company the rights granted under this Option Agreement; and, to enter into the Purchase Agreement and the Easement Agreement if Company exercises the Option. When signed by the parties, this Option Agreement constitutes a valid and binding agreement enforceable against the Parties in accordance with its terms.

9. **Company's Due Diligence**. During the Option Term, Company or its representatives at Company's sole cost shall have the right of access to the Property for the purpose of installing equipment, making surveys, physical inspections and investigations, including but not limited to solar and environmental studies considered necessary by Company in connection with its proposed use of the Property under this Option Agreement, the Purchase Agreement or the Easement Agreement. Company will provide Landowner with reasonable prior notification of any entry on the Property. Company shall repair or reimburse Landowner for the cost of any damages to property caused by its entry upon the Property. Landowner shall cooperate with Company and its representatives to prevent competing usage of the Property by third parties (e.g., hunting) while such due diligence is being performed pursuant to this section.

10. **Taxes and Penalties**. Landowner will be held solely liable for any federal, state or local fines or penalties associated with disturbing of the Property illegally during the Option Term, except to the extent directly caused by Company or its representatives. Landowner shall also be responsible for all real estate taxes assessed against the Property during the Option Term. Landowner hereby certifies and represents that all real property taxes and assessments, general and special, related to the Property have been paid whenever such taxes and assessments were due and payable.

11. **Exclusivity of Option**. Subject to Section 12, Landowner shall not enter into any agreement or option with any third party to purchase, lease or occupy the Property prior to the expiration or termination of this Option Agreement. Landowner represents and warrants that, other than the SunPower Easement (as defined in Section 12), no person has any agreement or option to purchase, lease or occupy the Property or, if any person has such an agreement or option,

Landowner may terminate same at its sole discretion.

12. **SunPower Transmission Easement**. Company acknowledges that Landowner has or intends to enter into an agreement with SunPower providing SunPower with a 150-foot wide easement on the Property for the purposes of constructing, operating and maintaining transmission facilities on, over and across the Property (the "SunPower Easement"). Company agrees to cooperate with SunPower on the location of the SunPower Easement.

13. **Waiver of Consequential Damages**. IN NO EVENT SHALL COMPANY BE LIABLE TO LANDOWNER FOR ANY SPECIAL, CONSEQUENTIAL, INCIDENTAL, OR INDIRECT DAMAGES OR LOST PROFITS, HOWEVER CAUSED, ON ANY THEORY OF LIABILITY EVEN IF ADVISED OF SUCH A POSSIBILITY.

14. **Successors and Assigns**. This Option Agreement shall run with the land. Either Party may without the consent of the other assign its interest in this Option Agreement. Any assignment shall be subject to the terms and requirements of this Option Agreement. This Option Agreement shall inure to the benefit of and be binding upon the parties, their heirs, successors and assigns.

15. **Notices**. All notices or other communications required or permitted by this Option Agreement, shall be in writing and shall be deemed given or made when personally delivered or, in lieu of such personal service, five (5) days after deposit in the United States mail, first class, postage prepaid, certified, or one (1) business day after dispatch by Federal Express or other overnight delivery service of national scope, addressed as set forth in the table set forth hereinabove.

16. **Further Assurances**. Each Party agrees to cooperate with the other Party and to execute any additional documents reasonably necessary or proper to carry out the provisions and spirit of this Option Agreement. Without limitation of the foregoing, Landowner agrees upon the written request of Company to execute and deliver to Company a short form or memorandum of this Option Agreement in a recordable form, which document may be recorded by Company in the real property records of the locality in which the Property is located.

17. **Purchase Agreement and Easement Agreement Controlling**. In the event a conflict arises between the terms and conditions of this Option Agreement and each of the Purchase Agreement and the Easement Agreement, the Purchase Agreement and the Easement Agreement, as the case may be, shall control.

18. **Counterparts**. This Option Agreement may be executed in any number of counterparts, each of which shall be an original and all, when taken together, shall constitute one and the same document. Transmission by facsimile or electronic transmission by pdf of an executed counterpart of this Option Agreement shall be deemed to constitute due and sufficient delivery of such counterpart.

19. **Entire Agreement; Modification**. This Option Agreement sets forth the entire agreement and understanding between the Parties with respect to the subject matter hereof and supersedes all prior discussions and agreements between the Parties, both written and oral. No modification of or amendment to this Option Agreement, nor any waiver of any rights under this Option Agreement,

will be effective unless in writing signed by the Party to be charged.

20. **Waiver**. If either Party fails to require the other to perform any term of this Option Agreement, that failure does not prevent the Party from later enforcing that term. If either Party waives the other Party's breach of a term, that waiver is not treated as waiving a later breach of that term.

21. **Governing Law**. This Option Agreement shall be governed by and construed in accordance with the internal laws of the Commonwealth of Virginia, without regard to any conflict of laws provision that would require the application of the law of any other jurisdiction.

IN WITNESS WHEREOF, the Parties have each executed this Option Agreement as of the Effective Date.

Landowner:

By: James S. Ferguson Jr.

Date:

Name: **JAMES S. FERGUSON**

By: Sheila B Ferguson

Date: 1-25-18

Name: **SHEILA B. FERGUSON**

By: John R Ferguson

Date: 1/25/18

Name: **JAMES FERGUSON, SR.**

Company:

MEHERRIN SOLAR LLC

a Delaware Limited Liability Company

By:

Date: Feb 1, 2018

Name: Karly Dyck

Title: Chief Financial Officer

By:

Date: Feb 1, 2018.

Name: Josée Guibord

Title: Senior Vice President & Secretary

EXHIBIT A

PURCHASE AGREEMENT TERM SHEET

The Purchase Agreement shall contain provisions covering substantially the following terms and provisions:

A. **PURCHASE PRICE:** [redacted]

B. **CLOSING:** Closing shall occur no later than thirty (30) days following the effective date of the Purchase Agreement. At closing, Company shall pay the Purchase Price, and Landowner shall execute and deliver a general warranty deed and such other documents as are required by a Title Company to issue a title insurance policy to Company covering the Solar Property, which title insurance policy shall be at Company's sole cost and expense. The Parties shall execute a settlement statement prepared by the Title Company. Real estate taxes shall be prorated as of the date of closing.

C. **TITLE AND SURVEY:** Company shall have the right to perform a survey of the Property and to have the Title Company issue a commitment for title insurance covering the Property and to make any objections to title and survey matters in Company's sole discretion. Landowner shall have no obligation to cure any such objections other than those Landowner agrees in writing to cure; provided, however, that Landowner shall cause any liens or judgments affecting the Property to be released at or prior to closing. It shall be a condition of Company's obligation to close that Company be satisfied with the condition of title in Company's sole discretion.

D. **REPRESENTATIONS AND WARRANTIES.** The Purchase Agreement shall contain such representations and warranties as are customary in real estate purchase and sale agreements and in any event shall contain a warranty of title by Landowner and representations of authority by both Company and Landowner.

E. **ASSIGNMENT:** Company shall have the right to assign its interests in the Purchase Agreement without Landowner's consent. Company shall provide written notice to Landowner of any such assignment, sublease, transfer, or conveyance.

EXHIBIT B

EASEMENT AGREEMENT TERM SHEET

The Easement Agreement shall contain provisions covering substantially the following terms and provisions:

A. **EASEMENT AREA:** The Easement Area shall be a strip of land on the Outside Property, to be determined by the Parties, which shall be twenty-five feet (25') wide and shall (i) start at the Northwest portion of the property that abuts Pine Log Road; (ii) stop at the solar arrays closest to Pine Log Rd on the Northern section of such property. The Easement Area shall extend twelve feet six inches (12' 6") on each side of a center line of the Electrical Connection Assets after same are installed.

B. **GRANT:** Landowner does hereby grant to Company an exclusive, perpetual easement on, in, along, across and under the Easement Area for the purposes of constructing, laying, inspecting, operating, maintaining and replacing underground and/or overhead Electrical Connection Assets (the "Electrical Connection Easement"). Any underground electric lines and/or fiber optic cables shall be below plow depth. The Electrical Connection Easement includes all of the rights, appurtenances and privileges necessary and incidental to the full use of the Easement Area for the purposes permitted in the Easement Agreement, including the right for ingress and egress over the Property outside the Easement Area. The Electrical Connection Easement shall provide for the interconnection of the Solar Facilities on the Useable Property to the Solar Facilities on the west side of Pine Log Road, Emporia VA.

   Company agrees to use commercially reasonable efforts to construct and lay the Electrical Connection Assets no less than thirty-six inches (36") below ground under the Easement Area and under the access road on the Outside Property. Landowner agrees to cooperate with Company on an alternative method for constructing the Electrical Connection Assets if Company is unable to construct same as described above.

C. **PAYMENT:** The Electrical Connection Easement payment shall be [redacted]

D. **NO INTERFERENCE:** Landowner shall not construct, install, or permit to be constructed or installed any improvements of any type whatsoever which would inhibit or impair any of Company's rights or benefits as set forth in the Easement Agreement. Landowner shall not grant or permit any person or persons, other than Company, any right-of-way, encumbrance, easement or other right or interest in, to or affecting the Easement Area, without the prior written consent of Company in each instance, which consent Company may grant, withhold or deny in its sole discretion.

E. **AGRICULTURAL ACTIVITIES:** The Company grants the Landowner the right to conduct farming and other agricultural activities in the Easement Area, provided that Landowner shall agree to conduct such activities in a manner that will not affect or negatively impact the construction, operation, maintenance and replacement of the Electrical Connection Assets.

F. **TAXES:** Landowner shall pay, when due, all real property taxes and assessments levied against Landowner's Property, including the Easement Area, and all personal property taxes and assessments levied against any property and improvements owned by Landowner and located on Landowner's Property. Company shall pay all personal property taxes and assessments levied against the Electrical Connection Assets, if any, when due. If Landowner's Property experiences any increase in the amount of real property taxes assessed as a result of the installation of the Electrical Connection Assets on Landowner's Property, including any reclassification of Landowner's Property, Company will be responsible for paying such increase.

G. **REMOVAL AND RESTORATION:** Within twelve (12) months after the surrender or termination of the Easement Agreement, Company shall remove all improvements to a depth of thirty-six (36) inches owned, installed or constructed by Company thereon, except for roads, and Company shall have a continuing easement to enter the Property for such purpose during such twelve (12) month period.

H. **INDEMNITY AND INSURANCE:** Prior to the commencement of construction, Company will indemnify Landowner for injuries and claims for direct damage to the extent caused by Company's exercise of its rights under the Electrical Connection Easement backed by general liability insurance with a combined single limit of [redacted].

I. **ASSIGNMENT:** Company shall have the right to sell, convey, lease, transfer or assign all or any portion of the Electrical Connection Easement, this Easement Agreement or the Electrical Connection Assets, or to apportion, grant sub-easements co-easements, separate easements, leases, licenses or similar rights, however denominated, to one or more persons or entities (collectively "Assignees"). Landowner may assign this Easement Agreement to any party in connection with any transfer of the Outside Property by Landowner; provided, however, that any such transfer shall be subject to this Electrical Connection Easement.

J. **COOPERATION:** Landowner shall reasonably cooperate in obtaining permits, signing documents requested by Company and its lenders, obtaining signatures of Landowner's tenants and lenders on non-disturbance agreements, and in all other matters relating to Company's proposed activities on the Outside Property.

K. **DEFAULT.** If Company fails to perform its obligations hereunder (an "Event of Default"), then it shall not be in default hereunder unless it fails to cure such Event of Default within sixty (60) days after receiving written notice from Landowner stating with particularity the nature and extent of such Event of Default and specifying the method of cure (a "Notice of Default"); provided, however, that if the nature or extent of the obligation or obligations is such that more than sixty (60) days are required, in the exercise of commercially reasonable diligence, for performance of such obligations(s), then Company shall not be in default if it commences such performance with such sixty (60) day period and thereafter pursues the same to completion with commercially reasonable diligence.

L. **OTHER TERMS AND PROVISIONS:** The Electrical Connection Easement shall contain other customary terms and provisions, including but not limited to provisions relating to non-interference, non-disturbance, quiet enjoyment, condemnation, waiver of any Landlord liens on Company's personal property, lender protection provisions (including but not limited to the right of any Company lender to receive notices of default and additional time to cure defaults and such other customary lender protection provisions), recording of memoranda, delivery of estoppels, further assurances and other reasonable and customary provisions.

EXHIBIT C

PROPERTY

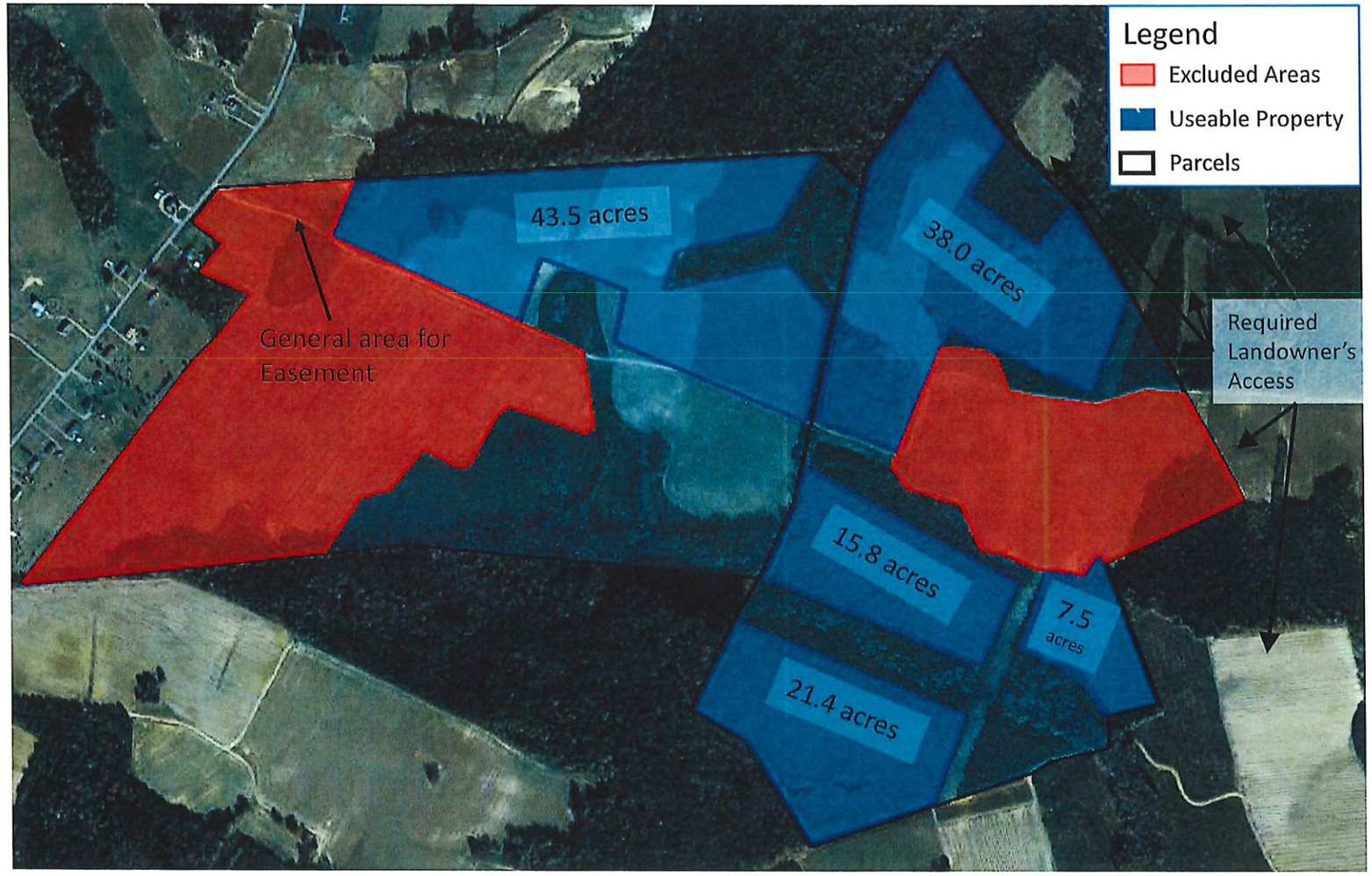
The Property consists of the following parcel:

- That certain property known as Greensville County Parcel 42-50 (tax map) also identified by the Greensville County GPIN: 7337-65-7683; and
- That certain property known as Greensville County Parcel 42-51 (tax map) also identified by the Greensville County GPIN: 7337-95-2080.

EXHIBIT D

SOLAR PROPERTY
AND EASEMENT AREA

Solar Property: A portion of the Property identified by the black boundary in the preliminary sketch below, which includes the Useable Property consisting approximately 126.2 acres, as generally identified by the blue boundary, to the exclusion of the Outside Property as generally identified by the red boundary:


Legend
Excluded Areas
Useable Property
Parcels
43.5 acres
38.0 acres
General area for Easement
Required Landowner's Access
15.8 acres
7.5 acres
21.4 acres

June 14, 2017

Ms. Mary Major
Renewable Energy Policy Manager
Department of Environmental Quality P.O. Box 1105 629 East Main Street Richmond, VA 23218
mary.major@deq.virginia.gov

Re: Sale of Projects and Need for new Notice of Intent for two SolUnesco projects located in: 1) Brink Virginia, Greensville County, 60 MWs.ac and 2) west of Chase City, Mecklenburg County, 60 MWs.ac

Dear Ms. Major

We are writing to inform you that the following two solar projects with previously issued Notice of Intents for the Permit by Rule process have been sold.

1. In a letter dated March 14, 2016, we submitted our Notice of Intent to initiate the Permit By Rule process for a small renewable energy project (solar) in Brink, Virginia, (Greensville County) for a 76.8 MW.dc, 60 MW.ac
2. In a letter dated April 27, 2016, we submitted our Notice of Intent to initiate the Permit By Rule process for a small renewable energy project (solar) west of Chase City, Virginia, (Mecklenburg County) for a 76.8 MW.dc, 60 MW.ac.

The Brink, Virginia project has been sold to Meherrin Solar LLC who intends to submit a new PBR Notice of Intent. The west of Chase City project has been sold to Otter Creek Solar LLC who also intends to submit a new PBR Notice of Intent. Both Meherrin Solar LLC and Otter Creek Solar LLC are wholly owned subsidiaries of Brookfield Renewable Energy Group.

If the Department has questions please feel free to contact

- Francis Hodsoll, SolUnesco, fhodsoll@solunesco.com, (703) 672-5738
- Terry Hartford, Brookfield Renewable, terence.hartford@brookfieldrenewable.com, (857) 313-7715

Sincerely,

F Hodsoll

Francis Hodsoll
CEO

SolUnesco, LLC
1818 Library Street, Suite 500
Reston, VA 20190
(703) 672-5097

Stantec Consulting Services Inc.
5209 Center Street, Williamsburg VA 23188-2680

June 14, 2017
File: 203400930

Attention: Ms. Mary Major
Renewable Energy Policy Manager
Department of Environmental Quality
P.O. Box 1105
629 East Main Street
Richmond, VA 23218
Email: mary.major@deq.virginia.gov

Dear Ms. Major,

Reference: Notice of Intent for Solar Energy Project in Brink, Virginia (Greensville County)

On behalf of Meherrin Solar LLC, a wholly-owned subsidiary of Brookfield Renewable, I am hereby providing notice to the Department of Environmental Quality of our intention to submit the necessary documentation for a permit by rule for a small renewable energy project (solar) in Brink, Virginia, pursuant to Virginia Regulation 9VAC15-60.

The project is located on the west side of Pine Log Road and south of Brink Road in Greensville County, Virginia. The project will be sited on roughly 530 acres across multiple parcels. The solar array will connect up to 60 Megawatts Alternating Current (AC) to Dominion Virginia Power's grid via a new 115kV substation built off of a nearby Dominion owned transmission line. The project will conceptually use 231,500 345W standard photovoltaic solar panels on a single axis tracker to follow the sun throughout the day.

If the Department has questions regarding this project, please contact Terry Hartford at (857) 313-7715.

Regards,

STANTEC CONSULTING SERVICES INC.

Jim Orrell
Project Manager
Phone: (757) 220-6869
Fax: (757) 229-4507
Jim.Orrell@stantec.com

c. Terence Hartford
Director, Project Development
Brookfield Renewable - North America
T (857) 313-7715 C (857) 265-8884
terence.hartford@brookfieldrenewable.com

APPENDIX B: MANGUM ECONOMIC ANALYSIS

The Economic and Fiscal Contribution that the **MEHERRIN SOLAR FACILITY WOULD MAKE TO GREENSVILLE COUNTY**

NOVEMBER 2017

MANGUM economics

Report prepared by

MANGUM
economics

Dr. Mangum earned his Ph.D. in economics at George Mason University in 1995. He has more than two decades of experience in quantitative analysis and policy development at the federal and state level.

Mangum Economic Consulting, LLC is a Richmond, Virginia based firm that specializes in producing objective economic, quantitative, and qualitative analysis in support of strategic decision making. Examples of typical studies include:

Policy Analysis
Identify the intended and, more importantly, unintended consequences of proposed legislation and other policy initiatives.

Economic Impact Assessments and Return on Investment Analyses
Measure the economic contribution that business, education, or other enterprises make to their localities.

Workforce Information
Project the demand for, and supply of, qualified workers.

Cluster Analysis
Use occupation and industry clusters to illuminate regional workforce and industry strengths and identify connections between the two.

Environmental Scanning
Assess the economic, demographic, and other factors likely to affect your enterprise in the future.

4201 DOMINION BOULEVARD, SUITE 114
GLEN ALLEN, VIRGINIA 23060

(804) 346-8446

MANGUMECONOMICS.COM

MANGUM economics

Executive Summary

This report assesses the economic and fiscal contribution that the proposed Meherrin Solar Facility would make to Greensville County. The primary findings from that assessment are as follows:

1) **The proposed Meherrin Solar Facility would make a significant economic contribution to Greensville County. We estimate that the proposed facility would be responsible for:**

   - An estimated one-time pulse of economic activity during its construction phase of approximately:
     - 96 full-time-equivalent jobs in Greensville County.
     - $5.0 million in associated labor income.
     - $16.6 million in additional economic output in Greensville County.
   - An ongoing estimated annual economic impact during its operational phase of approximately:
     - 7 full-time-equivalent jobs in Greensville County
     - $292,702 in associated labor income.
     - $539,806 in additional economic output in Greensville County.

2) **The proposed Meherrin Solar Facility would also make a significant fiscal contribution to Greensville County. After taking into account the proposed facility's effect on the county's composite index and locally funded school budget, we estimate that the proposed facility would generate:**

   - $77,353 in net county revenue in the facility's first year of operation (exclusive of county fees for permitting), with that figure projected to gradually decline to $8,595 in the facility's 25th year of operation, as the value of the proposed projected-related capital investments is depreciated.
   - A Net Present Value (NPV), or value in todays' dollars of the stream of local tax revenue payments from the proposed Meherrin Solar facility over its 25 year life expectancy, of $989,633 in local tax revenue.

The estimates provided in this report are based on the best information available and all reasonable care has been taken in assessing that information. However, because these estimates attempt to foresee circumstances that have not yet occurred, it is not possible to provide any assurance that they will be representative of actual events. These estimates are intended to provide a general indication of likely future outcomes and should not be construed to represent a precise measure of those outcomes.

Introduction

This report assesses the economic and fiscal contribution that the proposed Meherrin Solar Facility would make to Greensville County. The remainder of the report is divided into six sections. The *Meherrin Solar Facility* section provides a brief description of the project. The *Economic Impact* section provides an empirical assessment of the economic contribution that the Meherrin Solar Facility would make to Greensville County, as well as an estimate of the economic contribution that the property currently makes to the county. The *Fiscal Impact* section provides an assessment of the net fiscal contribution that the Meherrin Solar Facility would make to Greensville County, once the impact on the county's composite index is taken into account.

Meherrin Solar Facility

The proposed Meherrin Solar Facility would involve development of up to a 60-megawatt photovoltaic solar facility on approximately 530 acres of rural property in Greensville County, Virginia. The proposed Meherrin Solar Facility site would be located between Pine Log Road and Fountain Creek Road, near the intersection of Pine Log Road and Brink Road. Once the facility is operational, there will be little activity on the site, little to no associated traffic, and it will generate only minimal demands on county services. The solar panels employed at the site will be no more than ten feet tall and the project will be designed to minimize visual impact. In addition, because solar projects generate electricity with few or no moving parts, the facility will produce very little noise.

Economic Impact

In this section, we quantify the economic contribution that the proposed Meherrin Solar Facility would make to Greensville County. Our analysis separately evaluates the one-time pulse of economic activity that would occur during the construction phase of the project, as well as the annual economic activity that the project would generate during its ongoing operations phase. In addition, to provide a baseline for our analysis, we also estimate the economic contribution that the property provides to Greensville County in its current agricultural use.

MANGUM economics

Method

To empirically evaluate the likely local and statewide economic impact attributable to the proposed Meherrin Solar Facility, we employ a regional economic impact model called IMPLAN.[1] The IMPLAN model is one of the most commonly used economic impact simulation models in the U.S., and in Virginia is used by UVA's Weldon Cooper Center, the Virginia Department of Planning and Budget, the Virginia Employment Commission, and other state agencies and research institutes. Like all economic impact models, the IMPLAN model uses economic multipliers to quantify economic impact.

Economic multipliers measure the ripple effects that an expenditure generates as it makes its way through the economy. For example, as when the Meherrin Solar Facility purchases goods and services – or when facility employees use their salaries and wages to make household purchases – thereby generating income for someone else, which is in turn spent, thereby becoming income for yet someone else, and so on, and so on. Through this process, one dollar in expenditures generates multiple dollars of income. The mathematical relationship between the initial expenditure and the total income generated is the economic multiplier.

One of the primary advantages of the IMPLAN model is that it uses regional and national production and trade flow data to construct region-specific and industry-specific economic multipliers. As a result, the economic impact estimates produced by IMPLAN are not generic, they reflect as precisely as possible the economic realities of the specific industry, and the specific study area, being evaluated.

In the analysis that follows, these impact estimates are divided into three categories. First round direct impact measures the direct economic contribution of the entity being evaluated (*e.g.*, own employment, wages paid, goods and services purchased, by the Meherrin Solar Facility). Second round indirect and induced impact measures the economic ripple effects of this direct impact in terms of business to business, and household (employee) to business, transactions. Total impact is simply the sum of the preceding two. These categories of impact are then further defined in terms of employment (the jobs that are created), labor income (the wages and benefits associated with those jobs), economic output (the total amount of economic activity that is created in the economy), and fiscal impact (the state and local tax revenues that are generated by this economic activity).

[1] IMPLAN v.3 is produced by Minnesota IMPLAN Group, Inc.

Construction Phase

In conducting our analysis of the one-time economic and fiscal impact that the proposed Meherrin Solar Facility would have on Greensville County during the construction phase of the project, we employ the following assumptions:

- Total design, engineering, and construction costs are estimated to be $60,717,801 for the Meherrin Solar Facility.[2]
- It is anticipated that approximately 23 percent of design, engineering, and construction expenditures would be spent with vendors in Greensville County.[3]
- Capital equipment costs are estimated to be $32,718,000 for the Meherrin Solar Facility.[4]
- It is anticipated that no capital equipment will be purchased from vendors in Greensville County.[5]

By feeding these assumptions into the IMPLAN model, we obtain the following estimates of one-time economic and fiscal impact. As shown in Table 1, construction of the proposed Meherrin Solar Facility would directly provide a one-time pulse of approximately: 1) 81 full-time-equivalent jobs, 2) $4.4 million in labor income, and 3) $14.2 million in economic output to Greensville County. Taking into account the economic ripple effects that direct investment would generate, we estimate that the total one-time impact on Greensville County would be: 1) 96 full-time-equivalent jobs, 2) $5.0 million in labor income, and 3) $16.6 million in economic output.

Table 2 details the ten industries within Greensville County that would receive the largest economic benefit from the proposed Meherrin Solar Facility during its construction phase.

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[2] *Data Source*: Brookfield Renewable.
[3] *Data Source*: Brookfield Renewable.
[4] *Data Source*: Brookfield Renewable.
[5] *Data Source*: Brookfield Renewable.

Table 1: **One-Time Economic Impact of the Meherrin Solar Facility on Greensville County – Construction Phase (2017 Dollars)**

Economic Impact:			
	FTE Employment	Labor Income	Output
First Round Direct Economic Activity	81	$4,377,921	$14,162,026
Second Round Indirect and Induced Economic Activity	16	$663,802	$2,479,567
*Total, Direct, Indirect, and Induced Economic Activity**	**96**	**$5,041,723**	**$16,641,593**

**May not sum due to rounding*

Table 2: **Top-Ten Industries Affected by Construction of the Meherrin Solar Facility in Greensville County (2017 Dollars)**

Industry	FTE Employment	Labor Income	Output
Construction of new highways and streets	50	$2,729,454	$9,643,026
Construction of new power and communication structures	23	$1,223,619	$3,400,000
Construction of new commercial structures, including farm structures	7	$397,283	$1,025,000
Commercial and industrial machinery and equipment rental and leasing	1	$77,019	$301,856
Stone mining and quarrying	1	$81,262	$299,119
Truck transportation	2	$74,185	$278,212
Architectural, engineering, and related services	1	$34,149	$115,576
Retail - Nonstore retailers	1	$12,993	$105,417

Table 2: Top-Ten Industries Affected by Construction of the Meherrin Solar Facility in Greensville County (2017 Dollars)

Industry	FTE Employment	Labor Income	Output
Retail - Gasoline stores	1	$17,398	$43,942
Full-service restaurants	1	$10,938	$28,238

Ongoing Operations Phase

In conducting our analysis of the annual economic and fiscal impact that the proposed Meherrin Solar Facility would have on Greensville County during the ongoing operations phase of the project, we employ the following assumptions:

- The Meherrin Solar Facility would employ one full-time employee at a salary of approximately $70,000.[6]
- The Meherrin Solar Facility would spend approximately $397,400 each year on the purchase of goods and services (*i.e.*, primarily for vegetation control and electrical maintenance).[7]

By feeding these assumptions into the IMPLAN model, we obtain the following estimates of annual economic and fiscal impact. As shown in Table 3, annual operation of the proposed Meherrin Solar Facility would directly provide approximately: 1) 7 full-time-equivalent jobs, 2) $272,686 in labor income, and 3) $467,400 in economic output to Greensville County. Taking into account the economic ripple effects that direct impact would generate, we estimate that the total annual impact on Greensville County would be: 1) 7 full-time-equivalent jobs, 2) $292,702 in labor income, and 3) $539,806 in economic output.[8]

Table 4 details the ten industries within Greensville County that would receive the largest economic benefit from the proposed Meherrin Solar Facility during its operational phase.

[6] *Data Source*: Brookfield Renewable.
[7] *Data Source*: Brookfield Renewable.
[8] This estimate does not include the economic value of the electricity produced by the facility, which would be substantial.

Table 3: Total Annual Economic Impact of the Meherrin Solar Facility on Greensville County – Operations Phase (2017 Dollars)

Economic Impact:			
	FTE Employment	Labor Income	Output
First Round Direct Economic Activity	7	$272,686	$467,400
Second Round Indirect and Induced Economic Activity	1	$20,016	$72,406
*Total, Direct, Indirect, and Induced Economic Activity**	**7**	**$292,702**	**$539,806**

**May not sum due to rounding*

Table 4: Top-Ten Industries Affected by Annual Operation of the Meherrin Solar Facility in Greensville County (2017 Dollars)

Industry	FTE Employment	Labor Income	Output
Electronic and precision equipment repair and maintenance	2	$135,010	$238,477
Landscape and horticultural services	4	$67,715	$159,001
Employment services	less than 1	$2,901	$5,141
Offices of physicians	less than 1	$2,882	$4,137
Truck transportation	less than 1	$639	$2,398
Automotive repair and maintenance, except car washes	less than 1	$993	$2,137
Full-service restaurants	less than 1	$558	$1,441
Home health care services	less than 1	$980	$1,094
Individual and family services	less than 1	$863	$1,087

Table 4: Top-Ten Industries Affected by Annual Operation of the Meherrin Solar Facility in Greensville County (2017 Dollars)

Industry	FTE Employment	Labor Income	Output
All other food and drinking places	less than 1	$930	$1,059

Current Agricultural Use

In this portion of the section, we provide a benchmark for the previous estimates of the economic contribution that the proposed Meherrin Solar Facility would make to Greensville County, by estimating the economic contribution that the site makes to the county in its current agricultural use. In conducting that analysis, we employ the following assumptions:

- The proposed Meherrin Solar Facility would be situated on a 530-acre tract of land.
- This property is currently used for agricultural production. However, 15 percent of the property is water, wetland, or riparian and unsuitable for agricultural use.[9]
- Average revenue per acre for Virginia farmland is approximately $456.10.[10]

By feeding these assumptions into the IMPLAN model, we obtain the following estimates of annual economic and fiscal impact. As shown in Table 5, in its current agricultural use we estimate that the proposed Meherrin Solar Facility site directly provides approximately: 1) 6 full-time-equivalent jobs, 2) $23,618 in labor income, and 3) $205,473 in economic output to Greensville County. Taking into account the economic ripple effects that direct impact generates, we estimate that the total annual impact on Greensville County is: 1) 6 full-time-equivalent jobs, 2) $26,468 in labor income, and 3) $216,419 in economic output.

Table 6 details the ten industries within Greensville County that currently receive the largest economic benefit from the proposed Meherrin Solar Facility in its current agricultural use.

[9] *Data Source*: Brookfield Renewable in consultation with current landowners.
[10] *Data Source*: Estimated based on data from the Virginia Department of Agriculture and Consumer Services.

Table 5: **Total Annual Economic Impact of the Meherrin Solar Facility site on Greensville County – Current Agricultural Use (2017 Dollars)**

Economic Impact:			
	FTE Employment	Labor Income	Output
First Round Direct Economic Activity	6	$23,618	$205,473
Second Round Indirect and Induced Economic Activity	0	$2,850	$10,946
*Total, Direct, Indirect, and Induced Economic Activity**	**6**	**$26,468**	**$216,419**

**May not sum due to rounding*

Table 6: **Top-Ten Industries Affected by the Current Agricultural Use of the Meherrin Solar Facility site in Greensville County (2017 Dollars)**

Industry	FTE Employment	Labor Income	Output
All other crop farming	6	$23,636	$205,627
Support activities for agriculture and forestry	less than 1	$884	$1,416
Cotton farming	less than 1	$185	$1,185
Full-service restaurants	less than 1	$48	$123
Tobacco farming	less than 1	$53	$547
Truck transportation	less than 1	$106	$396
Individual and family services	less than 1	$86	$108
Offices of physicians	less than 1	$282	$406
Home health care services	less than 1	$96	$107

Table 6: Top-Ten Industries Affected by the Current Agricultural Use of the Meherrin Solar Facility site in Greensville County (2017 Dollars)

Industry	FTE Employment	Labor Income	Output
All other food and drinking places	less than 1	$87	$100

Fiscal Impact

In this section, we quantify the net fiscal contribution that the proposed Meherrin Solar Facility would make to Greensville County. This analysis explicitly take into account the effect the proposed facility would have on the county's composite index and the local contribution to the county's school budget.

Table 7 provides a calculation of the gross additional revenue that the proposed Meherrin Solar Facility would generate for Greensville County over its 25 year life expectancy. This calculation is based on the value of the proposed capital improvements to the property (excludes development costs), times depreciation (pursuant to the State Corporation Commission's stipulated schedule), times the 80 percent local real property tax exemption (pursuant to Virginia Code § 58.1-3660), times Greensville County's real property tax rate of $0.67 per $100 of assessed value (pursuant to Virginia Code § 58.1-2606 and the county's published tax rate for real property).

As the data In Table 7 indicate, we estimate gross county revenue from the facility to be $106,299 in the facility's first year of operation (exclusive of county fees for permitting), with that figure projected to gradually decline to $11,811 in the facility's 25th year of operation, as the value of the proposed capital investments is depreciated. It is important to note that these estimates do not include county revenue from real estate tax on the existing property, and are therefore properly viewed as an addition to those existing revenues.

Table 7: Estimated Gross County Tax Revenue Generated by the Meherrin Solar Facility over its 25 Year Life Expectancy (2017 Dollars)

Year	Capital Investment[11]	Depreciation[12]	Depreciated Value of Capital Investment	Taxable Capital Investment (less 80% exemption)[13]	Gross Additional Annual County Tax Revenue[14]
1	$88,141,625	90%	$79,327,463	$15,865,493	$106,299
2	$88,141,625	90%	$79,327,463	$15,865,493	$106,299
3	$88,141,625	90%	$79,327,463	$15,865,493	$106,299
4	$88,141,625	90%	$79,327,463	$15,865,493	$106,299
5	$88,141,625	90%	$79,089,480	$15,817,896	$105,980
6	$88,141,625	87%	$76,938,824	$15,387,765	$103,098
7	$88,141,625	85%	$74,655,956	$14,931,191	$100,039
8	$88,141,625	82%	$72,240,876	$14,448,175	$96,803
9	$88,141,625	79%	$69,684,769	$13,936,954	$93,378
10	$88,141,625	76%	$66,970,007	$13,394,001	$89,740
11	$88,141,625	73%	$64,087,776	$12,817,555	$85,878
12	$88,141,625	69%	$61,038,075	$12,207,615	$81,791
13	$88,141,625	66%	$57,803,278	$11,560,656	$77,456
14	$88,141,625	62%	$54,383,383	$10,876,677	$72,874
15	$88,141,625	58%	$50,751,948	$10,150,390	$68,008
16	$88,141,625	53%	$46,900,159	$9,380,032	$62,846
17	$88,141,625	49%	$42,819,201	$8,563,840	$57,378
18	$88,141,625	44%	$38,491,448	$7,698,290	$51,579
19	$88,141,625	38%	$33,908,083	$6,781,617	$45,437
20	$88,141,625	33%	$29,042,665	$5,808,533	$38,917
21	$88,141,625	27%	$23,895,195	$4,779,039	$32,020
22	$88,141,625	21%	$18,430,414	$3,686,083	$24,697
23	$88,141,625	14%	$12,639,509	$2,527,902	$16,937
24	$88,141,625	10%	$8,814,163	$1,762,833	$11,811
25	$88,141,625	10%	$8,814,163	$1,762,833	$11,811

[11] *Data Source*: Brookfield Renewable. Excludes development costs.
[12] *Data Source*: State Corporation Commission.
[13] Calculated pursuant to Virginia Code § 58.1-3660 which stipulates that solar facilities over 20MW are subject to an 80 percent exemption from local property taxes.
[14] Calculated pursuant to Virginia Code § 58.1-2606 which stipulates that capital equipment owned by utilities is taxed as real property and the local tax rate on that capital equipment would be capped at Greensville County's real property tax rate of $0.67 per $100 of assessed value.

On average, Virginia localities fund 45 percent of their primary and secondary education expenditures and the Commonwealth of Virginia funds the remaining 55 percent. But, each locality's share is adjusted up or down based on a composite index that measures the locality's "ability to pay," as determined by the locality's property tax base, adjusted gross income, and taxable retail sales. Table 8 illustrates the likely effect that the capital improvements proposed as part of the Meherrin Solar Facility would have on Greensville County's composite index, and the county's share of its school budget, over the proposed facility's 25 year life expectancy.

The calculation presented in Table 8 is derived by: 1) using baseline data for Greensville County on County Taxable Real Property, Adjusted Gross Income, Taxable Retail Sales, County School Average Daily Membership (ADM), and County Population from the Virginia Department of Education's 2016-2018 Composite Index of Local Ability to Pay, 2) adjusting County Taxable Real Property in subsequent years using the Taxable Capital Investment figures from Table 7, and 3) applying those figures to the Virginia Department of Education's composite index formula to compute a revised composite index for Greensville County in each subsequent year.[15] That revised composite index is then applied to the County of Greensville's baseline FY 2016 locally funded school budget as reported by the Virginia Auditor of Public Accounts to determine the additional local school funding that would be required in each subsequent year relative to the baseline.

It is important to note that this calculation measures changes from the baseline only. No attempt is made to forecast future changes in county data beyond the addition to County Taxable Real property from the capital improvements proposed as part of the Meherrin Solar Facility. As shown in Table 8, based on these calculations, we estimate the Meherrin Solar Facility's addition to Greensville County's Taxable Real Property would increase required local school funding by $28,945 in the facility's first year of operation, with that figure projected to gradually decline to $3,216 in the facility's 25th year of operation, as the value of the proposed capital investments is depreciated.

[15] The Virginia Department of Education's composite index formula is: (0.5*(((0.66)*((County Taxable Real Property/County School ADM)/(State Taxable Real Property/State School ADM))+((0.33)*((County Taxable Real Property/County Population)/(State Taxable Real Property/State Population)))))+(0.4*(((0.66)*((County Adjusted Gross Income/County School ADM)/(State Adjusted Gross Income/State School ADM)))+((0.33)*((County Adjusted Gross Income/County Population)/(State Adjusted Gross Income/State Population)))))+(0.1*(((0.66)*((County Taxable Retail Sales/County School ADM)/(State Taxable Retail Sales/State School ADM)))+((0.33)* ((County Taxable Retail Sales/County Population)/(State Taxable Retail Sales/State Population))))).

Table 8: **Change in Composite Index and Required Local Contribution to School Budget Attributable to the Meherrin Solar Facility over its 25 Year Life Expectancy (2017 Dollars)**

Year	County Taxable Real Property[16]	Taxable Proposed Capital Investment[17]	Adj. County Taxable Real Property	Adj. Gross Income[18]	Taxable Retail Sales[19]	County School ADM[20]	County Pop.[21]	Composite Index[22]	Locally Funded School Budget[23]	Change in Locally Funded School Budget
Baseline	$702,998,572		$702,998,572	$151,714,765	$37,783,681	1,394	11,581	0.2236	$2,474,327	
1	$702,998,572	$15,865,493	$718,864,065	$151,714,765	$37,783,681	1,394	11,581	0.2262	$2,503,272	$28,945
2	$702,998,572	$15,865,493	$718,864,065	$151,714,765	$37,783,681	1,394	11,581	0.2262	$2,532,218	$28,945
3	$702,998,572	$15,865,493	$718,864,065	$151,714,765	$37,783,681	1,394	11,581	0.2262	$2,561,163	$28,945
4	$702,998,572	$15,865,493	$718,864,065	$151,714,765	$37,783,681	1,394	11,581	0.2262	$2,590,109	$28,945
5	$702,998,572	$15,817,896	$718,816,468	$151,714,765	$37,783,681	1,394	11,581	0.2262	$2,618,967	$28,859
6	$702,998,572	$15,387,765	$718,386,337	$151,714,765	$37,783,681	1,394	11,581	0.2261	$2,647,041	$28,074
7	$702,998,572	$14,931,191	$717,929,763	$151,714,765	$37,783,681	1,394	11,581	0.2260	$2,674,282	$27,241
8	$702,998,572	$14,448,175	$717,446,747	$151,714,765	$37,783,681	1,394	11,581	0.2259	$2,700,641	$26,360
9	$702,998,572	$13,936,954	$716,935,526	$151,714,765	$37,783,681	1,394	11,581	0.2259	$2,726,068	$25,427
10	$702,998,572	$13,394,001	$716,392,573	$151,714,765	$37,783,681	1,394	11,581	0.2258	$2,750,505	$24,436

[16] *Data Source*: Virginia Department of Education, 2016-18 Composite Index of Local Ability to Pay.
[17] *Data Source*: Baseline data are taken from the Virginia Department of Education, 2016-18 Composite Index of Local Ability to Pay. Subsequent annual calculations are taken from Table 7.
[18] *Data Source*: Virginia Department of Education, 2016-18 Composite Index of Local Ability to Pay.
[19] *Data Source*: Virginia Department of Education, 2016-18 Composite Index of Local Ability to Pay.
[20] *Data Source*: Virginia Department of Education, 2016-18 Composite Index of Local Ability to Pay.
[21] *Data Source*: Virginia Department of Education, 2016-18 Composite Index of Local Ability to Pay.
[22] *Data Source*: Baseline data taken from the Virginia Department of Education, 2016-18 Composite Index of Local Ability to Pay. Subsequent annual calculations are based on the Adjusted County Taxable Real Property, Adjusted Gross Income, County School Average Daily Membership (ADM), and County Population data presented for each year.
[23] *Data Source*: Virginia Auditor of Public Accounts.

Table 8: **Change in Composite Index and Required Local Contribution to School Budget Attributable to the Meherrin Solar Facility over its 25 Year Life Expectancy (2017 Dollars)**

Year	County Taxable Real Property[16]	Taxable Proposed Capital Investment[17]	Adj. County Taxable Real Property	Adj. Gross Income[18]	Taxable Retail Sales[19]	County School ADM[20]	County Pop.[21]	Composite Index[22]	Locally Funded School Budget[23]	Change in Locally Funded School Budget
11	$702,998,572	$12,817,555	$715,816,127	$151,714,765	$37,783,681	1,394	11,581	0.2257	$2,773,889	$23,385
12	$702,998,572	$12,207,615	$715,206,187	$151,714,765	$37,783,681	1,394	11,581	0.2256	$2,796,161	$22,272
13	$702,998,572	$11,560,656	$714,559,228	$151,714,765	$37,783,681	1,394	11,581	0.2255	$2,817,253	$21,092
14	$702,998,572	$10,876,677	$713,875,249	$151,714,765	$37,783,681	1,394	11,581	0.2253	$2,837,096	$19,844
15	$702,998,572	$10,150,390	$713,148,962	$151,714,765	$37,783,681	1,394	11,581	0.2252	$2,855,615	$18,519
16	$702,998,572	$9,380,032	$712,378,604	$151,714,765	$37,783,681	1,394	11,581	0.2251	$2,872,728	$17,113
17	$702,998,572	$8,563,840	$711,562,412	$151,714,765	$37,783,681	1,394	11,581	0.2250	$2,888,352	$15,624
18	$702,998,572	$7,698,290	$710,696,862	$151,714,765	$37,783,681	1,394	11,581	0.2248	$2,902,397	$14,045
19	$702,998,572	$6,781,617	$709,780,189	$151,714,765	$37,783,681	1,394	11,581	0.2247	$2,914,770	$12,373
20	$702,998,572	$5,808,533	$708,807,105	$151,714,765	$37,783,681	1,394	11,581	0.2245	$2,925,367	$10,597
21	$702,998,572	$4,779,039	$707,777,611	$151,714,765	$37,783,681	1,394	11,581	0.2243	$2,934,086	$8,719
22	$702,998,572	$3,686,083	$706,684,655	$151,714,765	$37,783,681	1,394	11,581	0.2242	$2,940,811	$6,725
23	$702,998,572	$2,527,902	$705,526,474	$151,714,765	$37,783,681	1,394	11,581	0.2240	$2,945,423	$4,612
24	$702,998,572	$1,762,833	$704,761,405	$151,714,765	$37,783,681	1,394	11,581	0.2238	$2,948,639	$3,216
25	$702,998,572	$1,762,833	$704,761,405	$151,714,765	$37,783,681	1,394	11,581	0.2238	$2,951,855	$3,216

Finally, Table 9 combines the results from the calculations depicted in Table 7 and 8 to provide an estimate of the net fiscal contribution that the proposed Meherrin Solar Facility would make to Greensville County over the period of its 25 year life expectancy. As these data indicate, we estimate net county revenue from the facility to be $77,353 in the facility's first year of operation (exclusive of county fees for permitting), with that figure projected to gradually decline to $8,595 in the facility's 25th year of operation, as the value of the proposed capital investments is depreciated. Overall, we estimate the Net Present Value (NPV), or value in todays' dollars, of the stream of local tax revenue payments from the proposed Meherrin Solar facility over its 25 year life expectancy to be $989,633.[24]

Table 9: Estimated Net County Tax Revenue Generated by the Meherrin Solar Facility over its 25 Year Life Expectancy (2017 Dollars)

Year	Gross Additional Annual County Tax Revenue[25]	Change in Locally Funded School Budget[26]	Net Additional Annual County Tax Revenue
1	$106,299	$28,945	$77,353
2	$106,299	$28,945	$77,353
3	$106,299	$28,945	$77,353
4	$106,299	$28,945	$77,353
5	$105,980	$28,859	$77,121
6	$103,098	$28,074	$75,024
7	$100,039	$27,241	$72,798
8	$96,803	$26,360	$70,443
9	$93,378	$25,427	$67,951
10	$89,740	$24,436	$65,303
11	$85,878	$23,385	$62,493
12	$81,791	$22,272	$59,519
13	$77,456	$21,092	$56,365
14	$72,874	$19,844	$53,030
15	$68,008	$18,519	$49,489
16	$62,846	$17,113	$45,733
17	$57,378	$15,624	$41,754
18	$51,579	$14,045	$37,534
19	$45,437	$12,373	$33,064

[24] The discount rate used in this calculation is 2.78 percent, the rate on 30-year U.S. Treasury bonds as of November 17, 2017. *Data Source*: U.S. Department of Treasury.
[25] From Table 7.
[26] From Table 8.

Table 9: Estimated Net County Tax Revenue Generated by the Meherrin Solar Facility over its 25 Year Life Expectancy (2017 Dollars)

Year	Gross Additional Annual County Tax Revenue[25]	Change in Locally Funded School Budget[26]	Net Additional Annual County Tax Revenue
20	$38,917	$10,597	$28,320
21	$32,020	$8,719	$23,301
22	$24,697	$6,725	$17,972
23	$16,937	$4,612	$12,325
24	$11,811	$3,216	$8,595
25	$11,811	$3,216	$8,595
NPV			**$989,633**

The estimates provided in this report are based on the best information available and all reasonable care has been taken in assessing that information. However, because these estimates attempt to foresee circumstances that have not yet occurred, it is not possible to provide any assurance that they will be representative of actual events. These estimates are intended to provide a general indication of likely future outcomes and should not be construed to represent a precise measure of those outcomes.

APPENDIX C: REVIEW OF VIRGINIA COUNTY DECOMMISSIONING REQUIREMENTS

SolUnesco

Review of Virginia County Decommissioning Requirements

Updated July 5, 2018

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Summary

SolUnesco has reviewed county ordinances and solar generating facilities county permits to provide a comprehensive review of the requirements imposed by counties in the Commonwealth of Virginia related to decommissioning of solar generating facilities. SolUnesco has reviewed 12 counties' zoning ordinances that include specific decommissioning requirements and the permits of 27 solar generating facilities – in a few cases the permit applications are still under review. Combined within these county ordinances and county level project permits, we have found that 15 explicitly require or expect a decommissioning plan, which typically includes: (1) the anticipated life of the project; (2) the estimated decommissioning cost in current dollars; (3) how said estimate was determined; (4) the manner in which the project will be decommissioned; and (5) a surety, in a form acceptable to the County Attorney, sufficient to cover the cost of decommissioning the solar energy facility.

Many of these counties (17) require the net costs of decommissioning to be secured by an adequate surety in a form agreed to by the County Attorney, including but not limited to a letter of credit, cash, or a guarantee by an investment grade entity. This cost is usually posted within 30 days of the project receiving its occupancy permit. Only Mecklenburg County limits the financial security to cash escrow.

Many counties explicitly allow for "salvage value" in the calculation of the net decommissioning costs: in four instances the counties require a reduction in salvage value by 10%, in two instances the counties require a reduction in salvage value by 20%, and in three instances the counties expressly allow for 100% of the salvage value to be included. In addition, 20 counties are silent on the issue of salvage value.

To address inflation and other changes to market conditions, most counties include a mechanism for calculating increased removal costs due to inflation. 15 counties require the decommissioning cost estimate to be updates every five years.

In four permits, the decommissioning plan and costs estimates are to be delivered to the county after the issuance of the county zoning permit. One county did not address decommissioning requirements in their permit for a solar generating facility.

Zoning Ordinances

Campbell Zoning, Ordinance

The applicant shall provide a **performance bond or other agreed-upon secured funding** sources payable to the Board of Supervisors in a form **approved by the County Attorney** to ensure that performance obligations are satisfied, up to and including the costs for decommissioning, **unless the Board of Supervisors specifically waives the requirement in an approval of the special use permit**. When a solar energy project is scheduled to be abandoned, the facility owner or operator shall notify the Zoning Administrator in writing prior to ceasing operations and shall provide a schedule for implementation of the decommissioning plan. If any solar energy project is **not operated for** a continuous period of one **(1) year**, or if the **work** called for in the **decommissioning** plan **fails to progress in a timely manner**, the Board of **Supervisors may take any necessary action to compel the physical removal** of the solar energy project in compliance with the decommissioning plan after written notice is provided to the project owner by certified mail. **The project owner shall have thirty (30) days from the date of the letter to provide a written explanation of the inactivity** and to request a delay in action by the Board of Supervisors.

Caroline County, Draft Ordinance

A **decommissioning bond in an amount to be determined by a registered design professional and approved by staff shall be required prior to final site plan approval**.
The decommissioning bond shall be re-**evaluated every 5 years** from start of operations and updated accordingly to reflect inflation. All reclamation/decommissioning efforts shall be **completed, no later than two (2) years from the date the facility ceases to generate electricity**, in accordance with the Applicant's reclamation plan and be returned to a pre-development state.

Culpeper County, Draft Utility Scale Solar Development Policy

The applicant shall provide a decommissioning plan to ensure that property will be returned to its original condition upon closure of any facility, or at the end of its useful life. **Decommissioning shall be guaranteed by a surety, performance bond, etc. to be approved by the County Attorney and in accordance with any adopted County policy**.

Decommissioning of facility.

Either at the end of its **lifespan or** in the event of **inactivity for more than two consecutive years**. In **general, all panels and pilings not be anchored with concrete footings so as to aid in removal after the life of the facility**.

a. Notice of inactivity- The **applicant or owner shall be responsible for notifying the Zoning Administrator within 30 days of the facility becoming inactive** or no longer producing electric power. Notification shall be provided in writing.

b. **Failure to return the facility to an active status and producing electric power for two consecutive years shall constitute grounds for special use permit revocation**.

c. Decommissioning process- upon completion of the facility's lifespan or following revocation of the special use permit, the facility shall be decommissioned, and **returned to the condition prior to construction of the facility; including removal of all equipment and debris**.

d. **Trenches or other borings or excavations** made in association with the facility **shall be filled** and **compacted**

e. **All wetland protections, natural vegetation, erosion control, and stormwater features shall remain in place**.

f. The Applicant or owner shall provide a decommissioning plan to staff and obtain all required permits prior to conducting decommissioning activities.

g. All **decommissioning activities shall be completed within six (6) months** of providing notice of inactivity.

h. If the facility is not removed within the specified time after the County Notice, the County may cause the removal of the facility with costs being borne by the project owner.

i. A surety agreement and surety in a form acceptable to the County Attorney shall be submitted at the time of construction permit. The surety amount shall be reviewed every 5 years and adjusted according to inflation.

Gloucester County, Zoning Ordinance

A **decommissioning plan**, which shall include the following: (1) the **anticipated life of the project**; (2) the **estimated decommissioning cost in current dollars**; (3) how said **estimate was determined**; (4) the **manner** in which the project **will be decommissioned**; and (5) a **surety**, in a form **acceptable** to the **County Attorney**, sufficient to cover the cost of decommissioning the solar energy facility. The complete decommissioning plan shall be submitted for review concurrent with the site plan.

i. The decommissioning **surety** shall be **posted prior to obtaining a land disturbance permit** (LDP) for the project; or ii. In the case of a multi-phase project, a separate decommissioning surety may be submitted prior to land disturbance permitting for each individual phase of the project.

Halifax County, Ordinance Amendment

(d) decommissioning plan; security

The applicant shall provide a **detailed decommissioning plan** that provide **procedures and requirements** for **removal of all parts** of the solar energy generation facility and its various structures at the end of the useful life of the facility or if it is deemed abandoned pursuant to section 53-160. The plan shall include the anticipated life of the facility, the **estimated overall cost of decommissioning** the facility in current dollars, the **methodology** for determining such estimate, and the **manner in which the project will be decommissioned**. The decommissioning plan and the estimated decommissioning cost will be **updated upon the request of the zoning administrator**, provided the update shall be **no more frequently** than once **every five years** and **no less frequently** than once **every ten years**.

(ii) Prior to operation, the **applicant must provide security in the amount of the estimated cost of the decommissioning. Options for security** include a **cash escrow**, a **performance surety bond**, a **certified check**, an **irrevocable letter of credit**, or **other security acceptable to the county** in an amount equal to the estimated decommissioning cost developed and updated in accordance with the decommissioning plan acceptable to the county. The security must remain valid until the decommissioning obligations have been met. The **security may be adjusted up or down by the county if the estimated cost of decommissioning the facility changes**. The security must be renewed or replaced if necessary to account for any changes in the total estimated overall decommissioning cost in accordance with the periodic updated estimates required by the decommissioning plan. Obtaining and maintaining the requisite security will be a mandatory condition of the conditional use permit. The **security shall be in favor of Halifax County and shall be obtained and delivered to the county before any construction commences**.

(iii) The **decommissioning plan, cost estimates, and all updates of those plans and estimates shall be sealed by a Professional Engineer**.

Mecklenburg County, Zoning Ordinance

(f) Decommissioning plan

A detailed decommissioning plan, **certified by an engineer**, which shall include the following: (1) The **anticipated life** of the project;

(2) The **estimated decommissioning cost in current dollars**;

(3) How **said estimate was determined**;

(4) The **method of ensuring that funds will be available** for decommissioning and removal;

(5) The **method that the estimated decommissioning cost will be kept current**; and

(6) The manner in which the project will be decommissioned, and the site restored. The applicant shall provide a cost estimate for the decommissioning of the facility shall be **prepared by a professional engineer or contractor who has expertise in the removal of the solar farm**. The decommissioning cost estimate shall explicitly detail the cost and shall include a **mechanism for calculating increased removal costs due to inflation and without any reduction for salvage value**. This cost estimate shall be recalculated every five (5) years and the surety shall be updated in kind.

(g) A proposed method of providing **appropriate escrow, surety or security** for the cost of the decommissioning plan.

20.8 DECOMMISSIONING

The following requirements shall be met:

(a) Solar facilities which have **reached the end of their useful life** or have **not** been in **active** and **continuous service for a period of one** (1) year shall be removed at the owner's or operator's expense...

(d) The site shall be **re-graded and re-seeded to as natural condition as possible** within 12 months of removal of solar facilities. Re-grading and re-seeding shall be initiated within a six-month period of removal of equipment.

(e) Decommissioning shall be **performed** in **compliance** with the **approved decommissioning plan**...

(g) The estimated cost of decommissioning shall be guaranteed by the deposit of funds in an amount equal to the estimated cost in an escrow account at a federally insured financial institution approved by the County.

i. The applicant shall deposit the required amount into the **approved escrow account** before any building permit is issued to allow construction of the solar facility.

ii. The **escrow account agreement shall prohibit the release of the escrow funds without the written consent of the County**. The County shall consent to the release of the escrow funds upon on the owner's or occupant's compliance with the approved decommissioning plan. The County may approve the partial release of escrow funds as portions of the approved decommissioning plan are performed.

iii. The **amount of funds required to be deposited in the escrow account shall be the full amount of the estimated decommissioning cost without regard to the possibility of salvage value**.

iv. The owner or occupant shall **recalculate** the estimated cost of decommissioning **every five years**. If the recalculated estimated cost of decommissioning exceeds the original estimated cost of **decommissioning by ten percent (10%), then the owner or occupant shall deposit additional funds into the escrow account to meet the new cost estimate. If the recalculated estimated cost of decommissioning is less than ninety percent (90%) of the original estimated cost of decommissioning, then the County may approve reducing the amount of the escrow account to the recalculated estimate of decommissioning cost.**

v. The **County may approve alternative methods** to secure the availability of funds to pay for the decommissioning of a utility-scale solar facility, **such as a performance bond, letter of credit, or other security approved by the County**.

(h) If the owner or operator of the solar facility **fails to remove the installation** in accordance with the requirements of this permit or within the proposed date of decommissioning, the **County may collect the surety and the County or hired third party may enter the property to physically remove the installation**.

Middlesex County, Zoning Ordinance

If the Solar Energy Facility is **inactive, completely or substantially discontinuing the delivery of electricity** to an electrical grid) for a **continuous twenty-four (24) month** period it shall be considered abandoned. The Applicant shall provide notice to County Staff immediately upon the site becoming inactive and/or shutting down operation. The current owner of the Project ("Project Owner") shall **remove** the facilities ("**decommissioning**") **within twelve (12) months of** receipt of **notice** from the County ("County Notice"). **If** the **facility** is **not removed** within the specified time after the County

Notice, the **County may cause the removal** of the solar energy farm with **costs being borne by the Project Owner**.

Unless the solar energy farm is owned by a public service corporation in the Commonwealth of Virginia, the **costs of decommissioning shall be secured by an adequate surety in a form agreed to by the County Attorney, including but not limited to a letter of credit, cash, or a guarantee by an investment grade entity**. If the solar energy farm is sold to any entity that is not a public service corporation, the **Special Exception shall not transfer to the purchaser until such time as the adequate surety is provided**. If surety is required, the cost estimates of the decommissioning shall be **updated every five (5) years** and provided to the County. At its option, the **County may require the surety amount be increased based on the net cost of decommissioning**.

The **Solar Energy Facility shall be deconstructed and removed within twelve (12) months** of the time the Solar Site is permanently decommissioned. As used herein "deconstructed and removed" shall mean

i. the **removal from the surface of the Property, any Project facilities installed or constructed thereupon, including permanent foundations up to 3 feet below ground surface**,

ii. the filling in and compacting of all trenches or other borings or excavations made in association with the Solar Facility, and (iii) the removal of all debris caused by the solar facility from the surface of the property. All decommissioning shall be subject to all applicable permits and authorizations as they may relate at the time of decommissioning.

Northampton County, Zoning Ordinance

All broken or waste solar modules shall be removed from the site within 60 days of being taken out of service. Removal of abandoned solar generating equipment.

(1) **A bond, whose amount shall be determined by the Director of Planning**, shall be required to assure removal of an unused solar energy power generating system.

(2) Any solar energy power generating system that has **not operated for a continuous period of 12 months shall be considered unused and abandoned**. The **owner** of an unused system **shall remove** the entire system **within six months** of receipt of notice from Northampton County notifying the owner of the equipment removal requirement. Removal includes removing **any underground structures or supports and electrical transmission wire.** All materials must be legally removed from the site. The site shall be **restored to its original condition after removal is complete**.

The applicant shall **submit a decommissioning plan**, which describes the **anticipated life** of the project, the **cost for removal**, **evidence of decommissioning funds (bond, insurance, or other guarantee), and the plans for restoring the soils and vegetation** on the site after removal of the wind turbine. The **applicant shall annually provide the Board of Supervisors with evidence of sufficient decommissioning funds**, in the form of a **performance bond or surety bond**, to allow Northampton County, at no cost to itself, to remove the project in the event that the applicant fails to comply with its decommissioning plan.

Pittsylvania County, Zoning Ordinance

Sec. 35-141(E) Decommissioning Requirements for Large and Utility Scale Solar Energy Facilities

The owner or operator of a large or utility scale solar energy facility shall completely **decommission a facility within 12 months if the facility ceases to generate electricity for a continuous period of 12 months** This period may be extended by the Board of Zoning Appeals if the owner or operator provides evidence that the failure to generate electricity is due to circumstances beyond their control and the facility has not been abandoned.

Decommissioning shall include the **removal of all solar collectors, cabling, electrical components, fencing and any other associated equipment, facilities and structures to a depth of at least 36 inches and stabilization of the site**.

A **decommissioning plan** shall be submitted, which shall include the following:

(1) the **anticipated life** of the project;

(2) the **estimated decommissioning cost in current dollars**;

(3) how said **estimate was determined**; and

(4) the **manner in which the project will be decommissioned**. As allowed by Section 35-714 of the Pittsylvania County Zoning Ordinance, the Board of Zoning Appeals shall require a **bond with surety or other approved security to ensure compliance with conditions imposed in a Special Use Permit**. The plan shall acknowledge that if at any time the project is declared to be an unsafe structure by the Pittsylvania County Building Code Official, the terms of the "unsafe structure" code shall apply.

Spotsylvania County, Zoning Ordinance

(10) Site(s) identified for SEF (Solar Energy Facility) use within the construction phasing plan shall be **remediated, whether revegitated, resoiled, or regraded, or any combination thereof as described within the decommissioning plan**.

(11) As part of the SEF application, the applicant shall **submit a decommissioning plan** executed and notarized by the landowner(s), applicant, and any other responsible party, and such plan shall include the following:

a. Identification of and full contact information for the party or parties, if any, other than the landowner(s) and the applicant responsible for decommissioning the site;

b. The **timeline and manner in which** the SEF will be decommissioned, and the site(s) restored to a **condition reasonably similar to the condition prior to development**;

c. The **estimated decommissioning cost in current dollars of each phase described in the construction phasing plan**;

d. The **estimated cost of post-decommissioning site restoration**. The estimations of the decommissioning costs shall be **calculated by a licensed engineer** and shall include all phases of decommissioning, **including land restoration**.

Suffolk County, Zoning Ordinance

(c) DECOMMISSIONING OR ABANDONMENT

(1) A **decommissioning plan** shall be provided **describing the removal** of the solar energy facility and **final land reclamation plan** to be followed after the anticipated useful life, or abandonment, or termination of the project, including **evidence of proposed commitments with affected parties (city, any lessor or property owner, etc.) that ensure proper final reclamation of the property**. Among other things, revegetation and road repair activities should be addressed in the plan.

(2) In the event that **no electricity is generated** for a continuous period of **twenty-four (24) months**, the solar energy facility owner and/or operator and/or property owner shall have **three (3) months to complete decommissioning** of the facility.

(3) **Decommissioning shall include removal of all solar panels and support structures, buildings, cabling, electrical components, roads, and any other associated facilities**.

(4) **Disturbed earth shall be graded and re-seeded, unless the landowner requests in writing that the access roads or other land surface areas not be restored**.

(5) A **performance surety**, in a form **approved by the city attorney** and in an **amount approved by the director**, shall be **submitted** by the applicant **prior** to the **issuance of a building permit** in order to insure removal of the solar energy facility when it is no longer to be used for solar generation.

Sussex County – BOS Minutes

The following is a draft of the Ordinance. SolUnesco has not been able to obtain the approved ordinance.

The **cost estimates of the decommissioning shall be updated every five (5) years** by an **independent consultant retained by the Project Owner and provided to the County**. The consultant shall be a **professional engineer** licensed in Virginia with expertise in the subject of decommissioning solar projects and shall be subject to the County's approval prior to being engaged by the Project Owner, which such approval shall not be unreasonably withheld. The consultant's reports will identify the **cost of decommissioning, taking into account any salvage value** of the installed equipment. The **surety amount will be increased or decreased based on such updated cost of decommissioning**, but the **surety shall not be below the minimum amount required by this condition**. The Project Owner shall be liable to the County for any deficiency if the bond amount does not fully fund the costs of decommissioning.

If the Project Owner intends to cease operations, or to shut down the project, it shall send the County Attorney written notice at least 90 days prior to such action and will provide, with such notice, a revised

consultant's report. The then-**current owner** of the Project ("Project Owner") **shall remove the facilities** ("decommissioning") **within six (6) months** of receipt of notice from the County ("County Notice"). If the facility is not removed within the specified time after the County Notice, the **County may cause the removal of the solar energy facility with costs being borne by the Project Owner**.

Permits and Applications

Accomack County – CUP, Eastern Shore Solar

Decommissioning the Eastern Shore Solar project in Accomack County, VA.

Eastern Shore Solar, LLC will agree to a **Decommissioning provision as a condition of the CUP**. The **Plan** will be **submitted** for approval **prior to issuance of Building Permits**. The Plan will be **accompanied** by a **separate Estimate for Decommissioning prepared by a Licensed Engineer**.

The **Estimate shall include the cost for removal, recycling/repurposing, disposal as necessary, and restoration of land. It shall include a salvage value credit due to the extensive copper, steel, aluminum and other materials in the project**. An agreed to **financial surety will be established and funded prior to commercial operation**. The **Estimate** to Decommission will be **revised every 5 years** and provided to the Landowners and the County. If the estimate changes to require more funds, the surety will be increasing to close the gap. Each of the land leases has a Decommission provision with the responsibility on ESS.

Accomack County – CUP, SunTec Solar Farm ESVA One

iii. Decommissioning Cost Estimates

SunTec shall provide a **Decommissioning Cost Estimate** prepared by a Virginia Licensed Engineer **prior to the issuance of building permits**, which shall include the following:

1. The **gross estimated cost** to perform the Decommissioning as set forth in Section 11 above (the "Gross Cost');

2. An **administrative and inflation factor of 20% of Gross Costs** (the "Admin Factor');

3. The **estimated resale and salvage values** associated with the Solar Farm Project equipment (the "Salvage Value");

4. A **reduction from the Salvage Value by 20%** such that only 80% of the Salvage Value can be used as a credit against the Gross Cost and the Admin Factor. The Salvage Value multiplied by 80% is the "Salvage Credit".

Therefore, the Decommissioning Cost Estimate formula is:

Gross Cost+ Admin Factor - Salvage Credit = the "Decommissioning Cost Estimate".

SunTec shall provide a revised and **updated** Decommissioning Cost Estimate on **every 5th anniversary** of the date when the Solar Farm Project first began to continuously deliver electric energy to the electric grid for commercial sales (the "Commercial Operation Date") fur the Solar Farm Project life, which shall **account for inflation, cost and value changes, and advances in decommissioning technologies** and approaches.

The Decommissioning Cost Estimate shall include a table **allocating the net cost estimate across the Solar Farm Project area**, based on the **percentage of generating capacity** in megawatts (MW) on each property (the "Allocation Areas'} The Allocation Areas will be divided based upon the lease areas, however the Allocation Areas will reference the underlying land, in case ownership of the underlying land changes during the life of the Solar Farm Project.

After SunTec prepares each Decommissioning Cost Estimate, the **County may elect** to have such Decommissioning Cost Estimate **reviewed by a Virginia Licensed Engineer** on behalf of the County, in which case reasonable engineering review fees shall be reimbursed by SunTec. Only one review shall be permitted in respect of each Decommissioning Cost Estimate.

iv. Financial Security

SunTec shall provide an amount equal to the Decommissioning Cost Estimate (as determined pursuant to Section Ill above); provided, however, that the amount of such **security shall never be less than Three Thousand One Hundred and Twenty-Five Dollars ($3,125) per MW (AC) of installed solar capacity** (the "Decommissioning Security"). Decommissioning Security shall be provided by SunTec prior to the Commercial Operation Date.

A **Virginia Licensed Engineer shall provide an updated Decommissioning Cost Estimate** on or before the fifth anniversary date of the Commercial Operation Date and **every five (5) years** thereafter during the Project Life. SunTec shall replenish and fully fund the Decommissioning Security based on each updated Decommissioning Cost Estimate, if applicable.

The **Decommissioning Security may be in one of the following forms**, as elected by SunTec: (i) **cash to be held in escrow** by the County Treasurer at a bank, or (ii) a **letter of credit** from a financial institution reasonably acceptable to the County which **shall be irrevocable** during the term thereof unless replaced with cash or another form of security reasonably acceptable to the County (each, a form of "Acceptable Credit Support"). SunTec shall post Acceptable Credit Support in the amount of the Decommissioning Security prior to the Commercial Operation Date.

Upon the receipt of the first updated Decommissioning Cost Estimate (following the 5th anniversary of the Commercial Operation Date), **any increase or decrease in the Decommissioning Security shall be funded by SunTec**, or refunded to SunTec (if permissible by the form of Credit Support and such that the Decommissioning Security is not less than Three Thousand One Hundred and Twenty Five Dollars ($3,125) per MW (AC) of installed solar capacity), within ninety (90) days and will be similarly tried for every subsequent five year updated Decommissioning Cost Estimate.

Albemarle County – SUP, Rivanna

While we expect to be able to retrieve **subsurface components to their full depth, we will guarantee removal of all subsurface components to either i) depth to bedrock or ii) 36 inches below original grade**, whichever is less. This depth is sufficient for future plowing and other agricultural requirements. The soil grade will also be restored following disturbance caused in the removal process. All access roads will be removed in accordance with the lease or other written agreement with the landowner. If the access road is required to be removed, **granular and geotextile materials may be removed from the site and where needed, topsoil will be applied to provide similar growing conditions to what was**

present before site disturbance. Storage and operation infrastructure and any associated temporary decommissioning improvements (e.g., temporary construction trailer) used during the decommissioning phase will be removed from the site. **Any foundations associated with these facilities will be removed to a depth of at least 36 inches below original grade. Perimeter fencing will be removed and recycled or re-used. Where the future landowner prefers to retain the fencing, these portions of the fence would be left in place**.

5.5.3. Costs

Before construction of the facility, this project will **obtain a 3rd party estimate of decommissioning costs. If required**, the project will **purchase a performance bond sufficient to cover these costs** and **maintain it for the life** of the project. At the county's request, the **project will update the decommissioning estimate every five years**, and if needed adjust the bond amount.

Appomattox County – CUP, Pamplin Solar Approval

WHEREAS, condition number 6 states "If the solar energy farm is **inactive**, completely or substantially discontinuing the delivery of electricity to an electrical grid for a **continuous twenty-four** (24) month period, it shall be considered abandoned. The petitioner shall provide written notice to County staff immediately upon the site becoming inactive and/or shutting down operation.

The current owner of the project ("Project Owner") **shall remove the facilities** ("decommissioning") **within six** (6) months of receipt of notice from the County ("County Notice"). If the facility is not removed within the specified time after the County Notice, the **County may cause the removal of the solar energy farm with costs being borne by the Project Owner**.

Unless the solar energy farm is owned by a public utility in the Commonwealth of Virginia, the costs of decommissioning shall be secured by an adequate surety in a form agreed to by the County Attorney. If the solar energy farm is sold to any entity that is not a public utility, then the **Conditional Use Permit shall not transfer to the purchaser until such time as the adequate surety is provided**. If a surety is required, the cost estimates of the **decommissioning shall be updated every five (5) years** and provided to the Zoning Administrator. At its option, the County may require the **surety amount be increased** based on the **net cost of decommissioning**.

Buckingham County – SUP, Buckingham II Solar

16. If the solar energy farm **is inactive, completely or substantially discontinuing the delivery** of electricity to an electrical grid) for a **continuous twenty-four (24) month** period it shall be considered abandoned. The Applicant shall provide notice to Zoning Administrator immediately upon the site becoming inactive and/or shutting down operation. The current owner of the Project ("Project Owner") shall **remove the facilities** ("decommissioning") **within six (6) months of receipt of notice** from the Buckingham County ("County Notice"). If the facility is not removed within the specified time after the County Notice, the **County may cause the removal of the solar energy farm with costs being borne by the Project Owner**.

Unless the **solar energy farm is owned by a public service corporation in the Commonwealth of Virginia, the costs of decommissioning shall be secured by an adequate surety in a form agreed to by**

the County Attorney, including but not limited to a letter of credit, cash, or a guarantee by an investment grade entity. If the solar **energy farm is sold to any entity that is not a public service corporation, the SUP shall not transfer to the purchaser until such time as the adequate surety is provided**.

If a surety is required, the cost estimates of the decommissioning shall be updated every five (5) years and provided to the County. At its option, the **County may require the surety amount be increased** based on the net cost of decommissioning. The surety, to the extent required, shall be initially provided before the issuance of the building permit.

17. The Project shall be **deconstructed and removed within six (6) months** of the time the Project Site is permanently decommissioned. As used herein "deconstructed and removed" shall mean (i) the **removal from the surface of the Property, any Project facilities installed or constructed thereupon, including permanent foundations, (ii) the filling in and compacting of all trenches or other borings or excavations made in association with the Project, and (iii) the removal of all debris caused by the Project from the surface of the Property**.

Chesterfield County – CUP, Phillip Morris Project

When the **useable life of the solar facility has been reached**, the **structures should be removed and the property reclaimed**. Condition 5 would require the solar facility to be decommissioned and the land **reclaimed within twelve (12) months** after the solar facility is no longer in use. Details of these plans would be required to be submitted for review and approval in conjunction with site plan review.

Clarke County – SUP, Hecate Energy LLC

The following condition shall set forth required provisions for decommissioning the facility either at the end of its lifespan or in the event of inactivity for more than two consecutive years.

Notice of inactivity

The Applicant or Owner shall be responsible for notifying the Zoning Administrator within 30 days of the facility becoming inactive and no longer producing electric power. Notification shall be provided in writing and shall include the date that the facility ceased producing power. **Failure to return the facility to an active status and producing electric power for two consecutive years shall constitute grounds for special use permit revocation**.

Decommissioning process

Upon **completion of the facility's lifespan or following revocation of the special use permit**, the facility shall be decommissioned including **removal of all equipment, panels, racking systems, wiring (including underground wiring), fencing, steel skids, concrete pads, and other above-ground features.** All wetland protections, natural vegetation, erosion control, and stormwater features shall remain in place. The Applicant or Owner shall provide a decommissioning plan to Staff and applicable State agencies and obtain all required permits prior to conducting decommissioning activities. All **decommissioning activities shall be completed within six months of providing notice of inactivity unless a longer time period is approved by the Zoning Administrator**.

Culpeper County – CUP Application, Culpeper North Solar

Decommissioning

It is proposed: If the solar energy farm is **inactive, completely or substantially discontinuing the delivery of electricity to an electrical grid) for a continuous twenty-four (24) month period it shall be considered abandoned**. The Applicant shall provide notice to Culpeper County Staff immediately upon the site becoming inactive and/or shutting down operation. The current owner of the Project ("Project Owner") shall **remove the facilities ("decommissioning") within six (6) months of receipt of notice** from the County ("County Notice"). If the facility is not removed within the specified time after the County Notice, the **County may cause the removal of the solar energy farm with costs being borne by the Project Owner**.

Unless the solar energy farm is owned by a public service corporation in the Commonwealth of Virginia, the net costs of decommissioning shall be secured by an adequate surety in a form agreed to by the County Attorney, including but not limited to a letter of credit, cash, or a guarantee by an investment grade entity, posted within 30 days of the project receiving its occupancy permit. If the solar energy farm is **sold to any entity that is not a public service corporation, the CUP shall not transfer to the purchaser until such time as the adequate surety is provided**.

If a surety is required, the cost estimates of the decommissioning shall be updated every five (5) years and provided to the County. At its option, the County may require the surety amount be increased based on the net cost of decommissioning.

Notice of inactivity.

All decommissioning activities shall be completed within six months of providing notice of inactivity unless a longer time period is approved by the Zoning Administrator.

Halifax County – CUP, Alton Solar

IV. Decommissioning Cost Estimate

The Facility Owner shall provide an estimate of the **cost to decommission the Project** (the "Decommissioning Cost Estimate") **prepared by a Virginia Licensed Engineer** prior to the issuance of permits for installation of the Project, which shall include the following:

(a) The **gross estimated cost** to perform Decommissioning as set forth in Section II above ("Gross Cost");

(b) An **administrative and inflation factor of 10% of the Gross Cost** (the "Admin Factor");

(c) The **estimated resale and salvage values associated with the Project equipment** ("Salvage Value"); and

(d) A **reduction in the Salvage Value by 10% such that only 90% of the Salvage Value can be used as a credit against the Gross Cost and Admin Factor**. The Salvage Value multiplied by 90% is the "Salvage Credit."

Thus, the Decommissioning Cost Estimate formula is: **Gross Cost + Admin Factor - Salvage Credit = the Decommissioning Cost Estimate**.

The **Facility Owner shall provide an updated Decommissioning Cost Estimate on every 1 other year anniversary of the date when the Project first began to continuously deliver electric energy to the electric grid for commercial sales** (the "Commercial Operation Date") during the Project Life, which shall account for inflation, cost and value changes, and advances in decommissioning technologies and approaches.

If the **Project lies on property owned by more than one person, entity or group (multiple owners), the Decommissioning Cost Estimate shall include a table allocating the Decommissioning Cost Estimate across the Project site, based on the percentage of generating capacity in megawatts (MW) attributable to each separately owned part of the property (the "Cost Allocation").**

V. Timing for Decommissioning

Upon the earlier of: (i) Completion of the Project Life; or (ii) Abandonment of the Project or any portion thereof, the Facility Owner shall promptly arrange for and be responsible for the full Decommissioning of the Project. If the Project or any portion thereof has **ceased operations** and is **not maintained for a continuous period of longer than one (1) year** and decommissioning is required before the end of the Project Life, the County may provide written **notice of suspected abandonment** to the Facility Owner. Upon receipt, the Facility **Owner shall have a sixty (60) day period in which to refute the claim**, remedy any problem, commence Decommissioning, or show why more than sixty (60) days is reasonably necessary to remedy the problem. If at the end of the sixty (60) day period the parties are unable to resolve amicably any dispute arising out of or in connection with this Decommissioning Plan, then such dispute shall be resolved by an action filed in the Circuit Court of Halifax County, Virginia.

Henrico County – CUP, Briel Farm

Decommissioning Cost Estimate

The Facility Owner shall provide an estimate of the cost to decommission the Project (the "Decommissioning Cost Estimate") **prepared by a Virginia Licensed Engineer** prior to the issuance of permits for installation of the Project, which shall include the following:

(a) The **gross estimated cost to perform Decommissioning** as set forth in Section II above ("Gross Cost");

(b) An **administrative and inflation factor of 10% of the Gross Cost** (the "Admin Factor");

(c) The **estimated resale and salvage values associated with the Project equipment** ("Salvage Value")

(d) A **reduction from the Salvage Value by 10% such that only 90% of the Salvage Value can be used as a credit against the Gross Cost and Admin Factor**. The Salvage Value multiplied by 90% is the "Salvage Credit".

Thus the **Decommissioning Cost Estimate formula** is:

Gross Cost+ Admin Factor - Salvage Credit= the Decommissioning Cost Estimate.

The Facility Owner shall provide an **updated** Decommissioning Cost Estimate on **every 10th year anniversary of the date when the Project first began to continuously** deliver electric energy to the electric grid for commercial sale (the "Commercial Operation Date"), which shall account for inflation, cost and value changes, and advances in decommissioning technologies and approaches. If the Project lies on property owned by more than one person, entity or group (multiple owners), the **Decommissioning Cost Estimate shall include a table allocating the net cost estimate across the Project area, based on the percentage of generating capacity in megawatts (MW) attributable to each separately owned property** (the "Cost Allocation").

IV. Timing for Decommissioning

Upon the **earlier** of: (i) **Completion of the Project Life**; or (ii) **Abandonment of the Project or any portion** thereof, the Facility Owner shall promptly arrange for and be responsible for the full Decommissioning of the Project. If the Project or any portion thereof has ceased operations and is not **maintained for a continuous period of longer than one (I) year** and decommissioning is required before the end of the Project Life, the **County may provide written notice of suspected abandonment** to the Facility Owner. Upon receipt, the **Facility Owner shall have a sixty (60) day period in which to refute the claim, remedy any problem**, commence Decommissioning, or show why more than sixty (60) days is reasonably necessary to remedy the problem. If after written notice as proscribed above the parties are unable to resolve amicably any dispute arising out of or in connection with this Decommissioning Plan, then such dispute shall be resolved by an action filed in the Circuit Court of Henrico County Virginia.

King William County – CUP, Hollyfield Solar

The Project must ensure the decommissioning of the solar farm and **provide a bond, cash, certified check, or irrevocable letter of credit in favor of King William County**. The Project is currently seeking a building permit for the installation of the solar farm. The total **decommissioning estimate** for including labor, materials, and equipment and disposal costs is **$1,341,368**. Upon decommissioning, many of the materials and components of the solar farm may be able to be sold for salvage/reuse. The total **salvage value** is estimated to be **$1,691,818**. As a result, the **final security amount is $0**. A detailed calculation of the final security amount is shown in Exhibit A. The Project proposes to fund the final security amount through the **use of a bond, letter of credit, cash or certified check**. The **value of the security** shall be based on the **estimated cost of executing the decommissioning** of the solar farm **less the salvage value** of the solar farm equipment and materials. The security shall remain in full force and effect until any necessary site restoration is completed to restore the site to a condition comparable to that which existed prior to the issuance of the Conditional Use Permit.

6. Decommissioning

Any solar power station that is **not in active use for a continuous period of 24 months** shall be **considered abandoned**, and the owner of any such facility, the land owner of the property on which a station is located upon or their successors or assigns shall **remove the facilities within six months** of **receipt of notice from the county**.

The owner of the facility shall secure the costs of decommissioning by providing and keeping in force a **decommissioning agreement and financial surety in a form agreed to by the County Attorney**. The owner of the facilities shall every five years **submit updated cost estimates for decommissioning the facilities and scrap value, adjusted for changes in inflation, scrap value and other factors**. At its option, the County may require the surety amount be increased based on the net cost of decommissioning.

Mecklenburg County – SEP, Otter Creek Solar

Decommissioning and Security - The applicant will decommission the project in accordance with the Decommission Plan submitted with the application. The **applicant will provide an updated decommissioning cost estimate acceptable to the Zoning Administrator as a basis for establishing the amount of security required and the estimate will not be based on salvage value**. The decommissioning cost estimate will include a reasonable explanation of how the elements of the estimate were developed and will also include unit price details where appropriate. The **applicant will provide a form of security acceptable to the Zoning Administrator to secure the availability of adequate funds to pay the cost of decommissioning** the project, The applicant will provide the approved security prior to the beginning of construction.

Mecklenburg County – SEP, Grasshopper

3) PROJECT DECOMMISSIONING COST ESTIMATE

3.1 Cost Estimate

Grasshopper Solar, LLC shall provide a **detailed Decommissioning Cost Estimate, prepared by a Virginia Licensed Engineer**, prior to the issuance of building permits, which shall include the following:

a) the **gross estimated cost to perform Decommissioning** as set forth in Section II above ("Gross Cost";

b) an **increase of the Gross Cost by 10% in order to eliminate any discrepancy** in cost estimation techniques ("Contingency");

c) the **estimated resale and salvage values associated with the Project equipment ("Salvage Value");**

d) a **reduction from the Salvage Value by 10% such that only 90% of the Salvage Value can be used as a credit against the Gross Cost and Admin Factor**. The Salvage Value multiplied by 90% Is the ("Salvage Credit").

Thus the Decommissioning Cost Estimate formula Is: **Gross Cost + Contingency Salvage Credit the "Decommissioning Cost Estimate".**

The **Decommissioning Cost Estimate shall include a table allocating the net cost estimate across the Project area**, based on the percentage of generating capacity in megawatts (MW) on each property ("Allocation Areas"). The Allocation Areas will be divided based upon the lease areas, however

Allocation Areas will reference the underlying land, in case ownership of the underlying land changes control during the life of the Project.

3.2 Security

Grasshopper Solar, LLC will provide an amount equal to the Decommissioning Cost Estimate (as determined by a Virginia Licensed Engineer, per section 3), ("Decommissioning Security"). Decommissioning Security shall be provided by Grasshopper Solar, LLC prior to the Commercial Operation Date.

The **Decommissioning Security** may be in one of the following forms: (i) **cash** to be held in **escrow by** the **County Treasurer at a Bank**, or (ii) a **letter of credit from a financial institution reasonably acceptable to the County which shall be irrevocable** unless replaced with cash or other form of security reasonably acceptable to County (each a form of "Acceptable Credit Support").

New Kent County – CUP, Correctional Solar

If the solar energy farm is **inactive, completely or substantially discontinuing the delivery of electricity to an electrical grid) for a continuous twenty-four (24) month period it shall be considered abandoned**. The Applicant shall provide notice to County Staff immediately upon the site becoming inactive and/or shutting down operation. The current owner of the Project ("Project Owner") shall **remove the facilities ("decommissioning") within six (6) months of receipt of notice from the County** ("County Notice"). If the facility is not removed within the specified time after the County Notice, the **County may cause the removal of the solar energy farm with costs being borne by the Project Owner**.

Unless the solar energy farm is owned by a public utility in the Commonwealth of Virginia, the net costs of decommissioning shall be secured by an **adequate surety in a form agreed to by the County Attorney, including but not limited to a letter of credit, cash, or a guarantee by an investment grade entity, posted within 30 days of the project receiving its occupancy permit or equivalent from the County. If the solar energy farm is sold to any entity that is not a public utility, the CUP shall not transfer to the purchaser until such time as the adequate surety is provided**.

If a surety is required; the cost estimates of the decommissioning shall be: **updated every five (5) years** and provided to the County. At its option, the county may require the surety amount be increased based on the net cost of decommissioning.

Powhatan County – CUP, Scott Timber Solar

The Project must ensure the decommissioning of the solar farm and **provide a bond, cash, certified check, or irrevocable letter of credit in favor of Powhatan County**.

The Project is currently seeking a building permit for the installation of the solar farm. The total decommissioning estimate for including labor, materials, and equipment and disposal costs is $1,354,939. Upon decommissioning, many of the materials and components of the solar farm may be able to be sold for salvage/reuse. The total salvage value is estimated to be $1,755,461. As a result, the **final security amount is $0**. A detailed calculation of the final security amount is shown in Exhibit A. The Project proposes to fund the final security amount through the use of a bond, letter of credit, cash or certified check. The value of the security shall be based on the estimated cost of executing the decommissioning of the solar farm less the salvage value of the solar farm equipment and materials. The security shall remain in full force and effect until any necessary site restoration is completed to restore

the site to a condition comparable to that which existed prior to the issuance of the Conditional Use Permit.

Prince George County – BOS Resolution, Rives Road Solar

A decommissioning plan shall be approved by the County prior to the approval of a site plan or any building permits being issued for a solar energy facility. If the solar energy facility is **inactive completely or substantially discontinuing the delivery of electricity to an electrical grid for a continuous twenty-four (24) month period it shall be considered abandoned**. The **applicant, owner or operator shall provide notice** to the Planning Division in writing once the property becomes inactive as a solar energy facility use. The **decommissioning** of the site shall **commence within six (6) months of receipt** of such notice from the applicant, owner or operator by Prince George County.

This shall be known as the "**Decommissioning Plan**" under Zoning Ordinance Section 90-16 (ii) (e) which **shall include** the following: (1) **anticipated life of the solar energy facility project**; (2) the **estimated cost of the decommissioning** in the future as **expressed in current dollars**; (3) **how said estimate was determined**; (4) the **manner in which the project will be decommissioned** and (5) the **name and physical address of the person or entity responsible for the decommissioning plan and a surety acceptable to the County** by guaranteeing completion of the decommissioning plan.

Unless the **large-scale solar energy facility project is owned by a public utility** within the Commonwealth of Virginia, the **net costs of decommissioning shall be secured by an adequate surety in a form agreed to by the County Attorney, including but not limited to a letter of credit, cash or a guarantee by an investment grade entity, provided to the County within thirty (30) days of the project receiving its occupancy permit** or equivalent from Prince George County to operate the use. If an adequate surety is required, the **cost estimates of the decommissioning shall be updated at least every five (5) years by the applicant, owner or operator and provided to the County**. If the solar energy **facility is sold to an entity that is not a public utility, the Special Exception shall not transfer to the purchaser until such time as adequate surety is provided for the solar energy facility**. At its option, the **County may require that a surety amount be increased based upon the net cost** of decommissioning the use as approved by the County Attorney.

Southampton County – CUP, Southampton Solar

A **cash bond equivalent to $10,000 per acre shall be provided to the County for decommissioning costs. A Decommissioning Cost Estimate will be provided for County review prior to the issuance of building permits and updated every five years**.

III. Decommissioning Cost Estimates

ESS shall provide a Decommissioning Cost Estimate prepared by a Virginia Licensed Engineer prior to the issuance of building permits, which shall include the following: (a) the **gross estimated cost to perform Decommissioning as set forth in Section II above ("Gross Cost"); (b) an administrative and inflation factor of 20% of the Gross Cost ("Admin Factor");**

(c) **the estimated resale and salvage values associated with the Project equipment ("Salvage Value") (d) a reduction from the Salvage Value by 20% such that only 80% of the Salvage Value can be used as**

a credit against the Gross Cost and Admin Factor. The Salvage Value multiplied by 80% is the "Salvage Credit".

Thus the Decommissioning Cost Estimate formula is:

Gross Cost + Admin Factor – Salvage Credit = the "Decommissioning Cost Estimate".

ESS shall provide a **revised and Updated Decommissioning Cost Estimate on every 5th anniversary** of the date when the Project first began to continuously deliver electric energy to the electric grid for commercial sales ("Commercial Operation Date") for the Project Life, which **shall account for inflation, cost and value changes**, and advances in decommissioning technologies and approaches.

The **Decommissioning Cost Estimate shall include a table allocating the net cost estimate across the Project area, based on the percentage of generating capacity in megawatts (MW) on each property** ("Allocation Areas"). The Allocation Areas will be divided based upon the lease areas, however Allocation Areas will reference the underlying land, in case ownership of the underlying land changes control during the life of the Project.

The **County may elect to have the Decommissioning Cost Estimates reviewed by a Virginia Licensed Engineer on behalf of the County, in which case reasonable engineering review fees shall be reimbursed by ESS**.

IV. Financial Security

ESS will provide an **amount equal to the Decommissioning Cost Estimate** (as determined by a Virginia Licensed Engineer, per section III), provided, however, that the amount of security shall **never be less than Two Hundred and Fifty Thousand Dollars ($250,000),** ("Decommissioning Security"). Decommissioning Security shall be provided by ESS prior to the Commercial Operation Date.

A **Virginia licensed engineer shall provide an Updated Decommissioning Cost Estimate** on or before the **fifth anniversary** of the Commercial Operation Date and **every five years thereafter** during the Project Life. **ESS shall replenish and fully fund the Decommissioning Security based on each Updated Decommissioning Cost Estimate**, if applicable. The **Decommissioning Security may be** in one of the following forms: (i) **cash** to be held in **escrow by the County Treasurer at a Bank**, or (ii) a **letter of credit from a financial institution reasonably acceptable to the County which shall be irrevocable** unless replaced with cash or other form of security reasonably acceptable to County (each a form of "Acceptable Credit Support").

ESS shall **post** Acceptable Credit Support in the amount of the Decommissioning Security **prior to the Commercial Operation Date**. Upon the receipt of the first Updated Decommissioning Cost Estimate (following the 5th anniversary of the Commercial Operation), any increase or decrease in the Decommissioning Security shall be funded by ESS, or refunded to ESS (if permissible by the form of Credit Support and such that Decommissioning Security is not less than $250,000), within ninety (90) days and will be similarly trued up for every subsequent five years updated

V. Timing for Decommissioning

such that **Decommissioning will be completed within six (6) months** of the end of the Project Life or Abandonment of the Project or any portion thereof, whichever first occurs. If a leaseholder or Accomack County believes that the Project or a portion thereof has been discontinued for longer than one (1) year (i.e. if the Project or any portion thereof has ceased operations for a continuous period of longer than one year) ("Abandoned"), and should be decommissioned earlier, consistent with the terms of the underlying lease or this Decommissioning Plan, then such landowner or Accomack County shall provide written notice of such Abandoned claim to ESS. Upon receipt, **ESS shall have a sixty (60) day period in which to refute the claim**, remedy any problem, commence Decommissioning under the lease agreement, or show why more than sixty (60) days is reasonably necessary to remedy the problem. If at the end of the sixty-day period the **parties are unable to resolve amicably any dispute arising out of or in connection with this Decommissioning Plan, then such dispute shall be resolved by an action filed in the Circuit Court of Accomack County, Virginia**.

VII. Completion of Decommissioning & Return of Financial Security

Decommissioning will be complete when the County Construction Official or County Engineer, or another party appointed by the County, determines that Decommissioning has been completed in accordance with this Decommissioning Plan. **Within forty-five (45) days of such determination of completion of Decommissioning, the County shall send a letter, with a copy to ESS, approving the release to ESS of the Decommissioning Security**.

VIII. Default by ESS of Decommissioning Responsibility

If **ESS is in default** of its obligation to **commence or complete Decommissioning**, and such default **remains uncured for more than 60 days** (as explained in section V), **each landowner shall have the right to commence Decommissioning activities and shall have access to each respective landowner's prorated percentage allocation of the Decommissioning Security plus the salvage value of the equipment and materials on their lands**. Excess funds shall be returned to the Decommissioning Security fund for use in Decommissioning other ESS property. Following the completion of Decommissioning of the entire Project arising out of a default by ESS, any remaining funds shall be distributed to landowners in a proportion consistent with the Allocation Areas as referenced in Section III. Nothing herein shall limit other rights or remedies that may be available to the County to enforce the obligations of ESS, including under the County's zoning powers.

Surry County – CUP, Colonial Trail

Decommissioning Cost Estimate

The Facility Owner shall provide an **estimate of the cost to decommission** the Project (the "Decommissioning Cost Estimate") **prepared by a Virginia Licensed Engineer prior** to the **issuance** of **permits for installation** of the Project, which shall include the following:

(a) The **gross estimated cost to perform Decommissioning** as set forth in Section II above ("Gross Cost");

(b) An **administrative and inflation factor of 10% of the Gross Cost** (the "Admin Factor");

(c) The **estimated resale and salvage values associated with the Project equipment** ("Salvage Value")

(d) A **reduction from the Salvage Value by 10%** such that only 90% of the Salvage Value can be used as a credit against the Gross Cost and Admin Factor. The Salvage Value multiplied by 90% is the "Salvage Credit".

Thus, the Decommissioning Cost Estimate formula is:

Gross Cost+ Admin Factor- Salvage Credit =the Decommissioning Cost Estimate.

The Facility Owner shall **provide an updated Decommissioning Cost Estimate on every 10th year** anniversary of the date when the Project first began to continuously deliver electric energy to the electric grid for commercial sales (the "Commercial Operation Date") during the Project Life, which shall account for inflation, cost and value changes, and advances in decommissioning technologies and approaches.

If the Project lies on property owned by more than one person, entity or group (multiple owners), the Decommissioning Cost Estimate shall include a **table allocating the net cost estimate across the Project area, based on the percentage of generating capacity in megawatts (MW) attributable to each separately owned property** (the "Cost Allocation").

IV. Timing for Decommissioning

Upon the earlier of: (i) Completion of the Project Life; or (ii) Abandonment of the Project or any portion thereof, the Facility Owner shall promptly arrange for and be responsible for the full Decommissioning of the Project.

If the Project or any portion thereof has **ceased operations and is not maintained for a continuous period of longer than one (1) year** and decommissioning is required before the end of the Project Life, the **County may provide written notice of suspected abandonment to the Facility Owner**.

Upon receipt, the **Facility Owner** shall have a **sixty (60) day period in which to refute the claim**, remedy any problem, commence Decommissioning, or show why more than sixty (60) days is reasonably necessary to remedy the problem. **If at the end of the sixty-day period the patties are unable to resolve amicably any dispute arising out of or in connection with this Decommissioning Plan, then such dispute shall be resolved by an action filed in the Circuit Court of Surry County Virginia.**

Westmoreland County – SEP, Westmoreland Solar

Prior to the issuance of permits for installation of equipment, a **plan for decommissioning the facility shall be provided. The solar energy system shall be decommissioned and removed within twelve (12) months after the facility ceases electricity generation for a continuous twelve-month period. Decommissioning shall include removal of solar collectors, cabling, electrical components, any bases or footers, and all other associated items.**