

SUSSEX COUNTY
SUSSEX BOARD OF SUPERVISORS &
PLANNING COMMISSION
JOINT PUBLIC HEARING

Blackwater Solar LLC Conditional Use Permit and Rezoning Applications

Monday, March 25, 2024 – 6:00 p.m.

Airfield 4-H Conference Center Auditorium
15189 Airfield Road, Wakefield, VA 23888

AGENDA

1. Call to Order/Determine Quorum
 - A) Board of Supervisors – Chairman Jones
 - B) Planning Commission – Chairwoman Massenburg
2. Overview of Process and Public Hearing Rules – Chairman Jones
3. Applicant Presentation on Blackwater Solar, LLC Conditional Use Permit and Rezoning Applications
4. Staff Findings and Recommendations
5. Public Hearing on Conditional Use Permit and Rezoning Applications
 - A) Board of Supervisors Action to Open Public Hearing
 - B) Planning Commission Action to Open Public Hearing
 - C) Public Comments
 - D) Planning Commission Action to Close Public Hearing
 - E) Board of Supervisors Action to Close Public Hearing
6. Board of Supervisors and Planning Commission Questions for Applicant and/or Staff
7. Planning Commission Action to Defer Consideration until April Regular Meeting
8. Adjournment
 - A) Planning Commission
 - B) Board of Supervisors

(next page)→



STAFF REPORT

Rezoning Application Review for Blackwater Solar Sussex County, Virginia

Report Date: March 20, 2024

Planning Commission/Board of Supervisors Joint Hearing Meeting Date: March 25, 2024

APPLICATION SUMMARY

Project:	Blackwater Solar, 600 MW and 400 MW Battery Energy Storage System (BESS)
Affected Acreage (subject to rezoning):	Total Parcel Area: 1,279 acres
Location:	Located within the Wakefield Planning Area approximately .5 mile from the Town of Wakefield on Courtland Road and Brittle's Mill Road. Courtland Road intersects the heart of the Tax Parcel 78-A-19, running north/south. The northwest portion of Tax Parcel 78-A-19 shares a boundary with Tax Parcel 60-A-15 which fronts Brittle's Mill Road in the vicinity of its intersection with Harrell Mill Road.
Parcel Record Numbers:	Two (2) parcels: 78-A-19; 60-A-15
Proposal:	Rezoning of two (2) parcels from Planned Unit Development (PUD) to A-1 for proposed use as a solar facility and battery energy storage facility as part of the separate Conditional Use Permit application.
Application Submitted:	May 5, 2023 Revised November 27, 2023
Applicant:	Blackwater Solar, LLC
Representative:	Ed Rumler Clenera, LLC Ed.rumler@clenera.com 517-292-9476
Owners:	Drumwright Property, LLC



BACKGROUND

The subject rezoning is comprised of two (2) parcels, 78-A-19, an approximately 963-acre parcel, and 60-A-15, an approximately 316-acre parcel. Both parcels are currently zoned Planned Unit Development (PUD), originally intended to be developed as the Drumwright Mill Subdivision, a 500-lot planned residential community.

DESCRIPTION OF PROPOSED DEVELOPMENT

The Applicant is seeking Rezoning of the two (2) parcels from Planned Unit Development (PUD) to A-1 for proposed use as a solar facility and battery energy storage facility as part of the separate Conditional Use Permit application. The subject parcel would be two (2) of the eighteen parcels comprising the proposed facility. A transmission line is located along the northern portion of the parcels with the point of interconnection for the solar facility, including substation and switchyard, located on parcel 60-A-15. With the exception of buffers/setbacks, the remainder of parcel 60-A-15 would be developed with fenced solar facility components, and parcel 78-A-19 is proposed to be similarly developed.

EXISTING CONDITIONS

Parcel 60-A-15 is approximately 316 acres of mixed timber forest, with a pond (Drumwright Pond) located on the east/southeast boundary line shared with Parcel 78-A-19. A small number of residences are located near the pond, accessed via Cantina Way and Drumwrights Ln – both private roads which are accessible from Brittle’s Mill Rd on the western boundary of the parcel. A transmission line runs from east to west along the northern portion of the parcel,

Parcel 78-A-19 is approximately 963 acres of mixed timber forest. The northeast portion of the parcel shares a boundary with 60-A-15. The parcel is predominantly surrounded by other mixed use or pine forest. Courtland Road bisects the parcel, running approximately north/south, intersecting the northern boundary of the parcel approximately ½ mile south of the southern boundary of Wakefield.

COMPREHENSIVE PLAN

The County’s 2004-2005 Comprehensive Plan serves as a policy document to inform planning and land use decision making. The Comprehensive Plan is not a regulatory document but should be used when applicable to evaluate projects and applications. As part of the Comprehensive Plan, most recently the County adopted Small Areas Plans as an addendum to the Plan. The subject properties are located in the Wakefield Small Area Plan, which contains the following analysis and considerations.

The future vision for the Wakefield Planning Area is as follows:

- *The Wakefield Planning Area is known for its rural character, significant cultural contributions, and abundant natural resources that will require a focused effort to preserve and further develop. Strengthening and diversifying the economy will require creative strategies to maximize the overall potential of the Planning Area.*



- *The presence of a high-volume transportation corridor, along with well-established commercial and public uses, available developable land, and large amounts of preserved natural lands makes Wakefield a great place for economic activity and investment.*
- *This vision builds upon a future land use analysis that prioritizes protecting the area's richest natural and cultural resources while also expanding commercial activity and residential development in appropriate locations. The full potential of the Wakefield Planning Area can be realized by capitalizing on the economic potential of travelers and also expanding job opportunities and improving quality of life for residents. Proper investment will also expand the County's tax base, leading to improvements in schools, social services, public facilities, and other community amenities.*
- *Future land use recommendations include the addition of some residential development near the Town of Wakefield as well as targeted growth in commercial and public uses.*
- *The U.S. 460 corridor should support new commercial and light industrial development while the outlying portions of the Planning Area are retained in their current undeveloped state. As a result, future land use in the Wakefield Planning Area will ensure that new and existing development avoids conflict with the existing natural features and transportation corridors that define this portion of Sussex County.*
- *The Wakefield Planning Area contains a wide variety of environmental features, including wetland areas, flood zones, riparian areas, and large forested tracts, that play an important role in plant and animal species diversity as well as natural water system filtering. The Planning Area already has a large amount of land that is actively managed and protected for its unique environmental features. Given the prevalence of natural features throughout the County, environmental conservation is a relevant consideration for all future land use categories discussed in this plan. New development should be guided towards previously disturbed locations and away from the boundaries of these preserved lands. Most of the land between U.S. 460 and Jerusalem Plank Road (State Route 35) is heavily forested and provides important natural habitat and forest resources that should be protected as much as possible through the County's land use tools.*
- *The County must ensure that development is limited near these environmental areas and should encourage low-impact development strategies and stormwater management improvements to protect habitat and water quality. This includes directly to the west of the Town of Wakefield where the Seacock Swamp has flood zones and riparian zones in an area that could eventually be developed. Additionally, farmers are encouraged to follow best management practices and take advantage of conservation and environmental programs as promoted by the Virginia Department of Agriculture and Consumer Services (VDACS).*
- *Protecting agricultural and forestry uses is central to maintaining the rural character that defines much of the Planning Area outside of the U.S. 460 corridor.*



The primary land use in the Wakefield Planning Area will continue to be rural in nature and include large tracts of agricultural, forest, and open land uses. These areas are labeled as Agricultural on the future land use map. The main purpose of this land use classification is to facilitate existing and future farming operations, allow for expansion of farm related activity, reduce the effects of soil erosion, and protect watersheds to promote the continuation of farming and forestry uses that are among the most important sectors of the economy.

- In planning for active agricultural and forestry use of parcels in the rural area, the County should consider the full scope of modern farming activities, including agritourism, on-site sales, food preparation, and events, and modify local regulations to more easily permit all activities that can help farmers maintain a profitable enterprise. Such activities have the added benefit of drawing visitors to the rural areas of Sussex County for tourism as well as providing additional income to farming operations. Large parcels will remain necessary for sustainable agricultural enterprise in the rural area.*
- Areas that are in forest preservation programs should be maintained to support the ecological balance between agriculture and forest. Private landowners, the Department of Forestry, the Department of Wildlife Resources, and The Nature Conservancy all have different management priorities. Where public access is permitted, the County should promote these important resources to be enjoyed for recreational and eco-tourism opportunities in addition to supporting the economic and natural benefits that these lands provide.*
- The Town of Wakefield and the immediate surrounding properties are the only locations with clustered residential land use in the Wakefield Planning Area. As a result, the proposed residential growth areas are concentrated around the existing clusters of dwellings outside of the Town and along routes that lead into the Town.*
- It is recommended that the continuation of the current trend toward linear housing development on routes leading into Town be limited. Where linear development is inevitable, shared driveways can be designed to reduce safety issues that arise with multiple single driveway access points.*
- Additionally, the County should work to develop parts of the proposed Drumwright Mill Subdivision property. While the full scale of that approved development may not still be feasible, the County should work with the current landowner of the property to promote the residential development of portions of the site that is coordinated with County utilities and services.*

The Wakefield Small Area Plan designates the Future Land Use as Residential and Agricultural, with a small area of the western portion principally designated as Residential and the majority of the parcels designated as Agricultural.

ZONING ORDINANCE



As noted in the Application, the intended solar facility and battery energy storage facility uses are not permitted uses in the current PUD zoning, resulting in the request to rezone the properties to the A-1 zoning district.

STAFF REVIEW AND COMMENTS

Staff is of the opinion that rezoning of the property to PUD to A-1 would generally align with the policies of the Comprehensive Plan. While the potential use and development of the property under the PUD zoning is specifically referenced in the Comprehensive Plan, if it has been determined that there is no viability to this development, Staff is of the opinion that there is no valid basis to require the PUD zoning to remain in place. The requested rezoning to A-1 is not inconsistent with policies established for this area of the County.

STAFF RECOMMENDATION

Based upon a review of the Application and the Staff comments, Staff recommends favorable approval of the requested rezoning.

Attachments:

- A. Rezoning Application, submitted May 5, 2023, and revised November 27, 2023



"Good Things Are Happening in Sussex County!"

Sussex County, Virginia

Planning and Zoning Department

APPLICATION FOR REZONING/CONDITIONAL ZONING AMENDMENT

This application should be used to petition for a change to the Official Zoning Map or for an amendment of zoning conditions. The following application requirements are consistent with the procedures set forth in Section 34-36, Amendments, of the Sussex County Zoning Ordinance, as amended.

A. APPLICATION FOR (CHECK ALL THAT APPLY):

[X] Rezoning

[] Conditional Rezoning (Are voluntary proffered conditions attached?): [] Yes [X] No

Request to change the subject property(s) from the PUD to the A-1 zoning district.

Proposed Use or Activity: Rezone the parcels to A-1 to be considered as part of the Conditional Use Permit Application for Blackwater Solar LLC

[] Amendment to Conditional Zoning

Request to change conditional zoning as follows (Attach current and proposed conditions): N/A

B. PROJECT DESCRIPTION:

Project Name: Drumwright Property, LLC

Property Address (if any):

Election District: Wakefield - 602

Comprehensive Plan Designation: Wakefield Planning Area

The rezoning will apply to 1279 acres out of 1279 total acres

Tax Parcel Identification # 78-A-19 Number of Acres to be Rezoned: 963

Requesting Zoning District Change from: PUD to A-1

Tax Parcel Identification # 60-A-15 Number of Acres to be Rezoned: 316

Requesting Zoning District Change from: PUD to A-1

Tax Parcel Identification # Number of Acres to be Rezoned:

Requesting Zoning District Change from: to

Proposed Utilities (check all that apply): Public Water [] Private Well [X]

Public Sewer [] Private Septic [X]



"Good Things Are Happening in Sussex County!"
 Sussex County, Virginia
 Planning and Zoning Department

C. APPLICATION INFORMATION:

Applicant(s) Name(s): Blackwater Solar LLC

Address: c/o Clenera, LLC, 999 W Main St, Suite 800

City, State, Zip Code: Boise, ID 83702

Phone No.: 517-292-9476 Email: ed.rumler@clenera.com Fax No.: _____

Property Owner(s) Name(s): Drumwright Property, LLC, Attn: Donald Wayne Pursell

Address: 9160 Granite Knoll Court

City, State, Zip Code: Las Vegas, NV 89129

Phone No.: 702-256-0099 Email: wayneandellie@hotmail.com Fax No.: _____

Applicants/Owners Affidavit (including compliance with all deed restrictions and covenants)

This application must be signed by the owner(s) of the subject property or must have attached written evidence of the owner's consent, which may be in the form of a binding contract of sale with the owner's signature or a letter signed by the owner(s), containing written authorization to act with full authority on the owner(s) behalf in filing this rezoning application. Signing this application shall certify the owner's compliance with all deed restrictions and covenants, and shall constitute the granting of authority of the County to enter onto the property for the purpose of conducting site analyses and compliance with Federal, State and County regulations.

Applicant: _____
 Printed or Typed Name

Owner: _____
 Printed or Typed Name

Applicant: _____ Date: _____
 Signature

Owner: _____ Date: _____
 Signature

County of Sussex, Commonwealth of Virginia

County of Sussex, Commonwealth of Virginia

Subscribed and sworn to before me _____
 _____, A Notary Public in and for
 the County of Sussex, Commonwealth of Virginia,
 this _____ day of _____, 20 _____

Subscribed and sworn to before me _____
 _____, A Notary Public in and for
 the County of Sussex, Commonwealth of Virginia,
 this _____ day of _____, 20 _____

 Notary Public

 Notary Public

My Commission Expires _____

My Commission Expires _____



"Good Things Are Happening in Sussex County!"

Blackwater Solar LLC

By: CRE-Blackwater Virginia LLC, Its Sole Member

By: Clenera DevCO, LLC, its Sole Member

By: Clenera Holdings, LLC, Its Sole Member

Sussex County, Virginia

Planning and Zoning Department

Applicant: Jason Ellsworth, Chief Executive Officer

Owner: _____

Printed or Typed Name

Printed or Typed Name

Applicant: [Signature]
Signature

Date: 11/27/2023

Owner: _____
Signature

Date: _____

County of Ada, State of Idaho

County of Sussex, Commonwealth of Virginia

Subscribed and sworn to before me Tammi Sevy, A Notary Public in and for the County of Ada, State of Idaho, this 27 day of November, 2023

Subscribed and sworn to before me _____, A Notary Public in and for the County of Sussex, Commonwealth of Virginia, this _____ day of _____, 20____

[Signature]
Notary Public

Notary Public

My Commission Expires May 11, 2026

My Commission Expires _____





"Good Things Are Happening in Sussex County!"

Sussex County, Virginia
Planning and Zoning Department

Applicant: _____
Printed or Typed Name

Owner: Donald Wayne Purcell
Printed or Typed Name

Applicant: _____ Date: _____
Signature

Owner: Donald Wayne Purcell
Signature

County of Sussex, Commonwealth of Virginia

County of Clark, State of Nevada

Subscribed and sworn to before me _____
_____, A Notary Public in and for
the County of Sussex, Commonwealth of Virginia,
this ____ day of _____, 20____

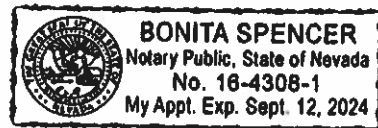
Subscribed and sworn to before me, Bonita
Spencer, a Notary Public in and for the County of
Clark, State of Nevada, this 22nd day of
November, 2023

Notary Public

Bonita Spencer
Notary Public

My Commission Expires _____

My Commission Expires 9.12.24





"Good Things Are Happening in Sussex County!"

Sussex County, Virginia

Planning and Zoning Department

NOTICE: THE ATTACHED CHECKLIST MUST BE COMPLETED, CERTIFIED, AND SUBMITTED OR THE APPLICATION WILL BE CONSIDERED INCOMPLETE.

Remit Application to: Sussex County Planning Department, 20135 Princeton Road, PO Box 1397, Sussex, Virginia 23884

FOR OFFICE USE ONLY:

Complete Application Received On: _____ Fees Paid: _____
Tax Query: [] Current [] Delinquent Distribution Date: _____
Posted/Date to Post: _____

AGENCIES REFERRALS:

- | | |
|---|----------------------------|
| _____ Department of Environmental Quality | _____ Building Inspections |
| _____ Finance | _____ Sheriff's Office |
| _____ Industrial Development Authority | _____ Town of Jarratt |
| _____ County Administration | _____ Town of Waverly |
| _____ Public Safety | _____ Town of Stony Creek |
| _____ Health Department | _____ Town of Wakefield |
| _____ VDOT | _____ Schools |
| _____ Commissioner of the Revenue | _____ County Attorney |
| _____ Sussex Service Authority | _____ Other _____ |

Verified By: _____ Date: _____



"Good Things Are Happening in Sussex County!"

Sussex County, Virginia
Planning and Zoning Department

COUNTY OF SUSSEX
DISCLOSURE OF REAL ESTATE HOLDINGS

Applicant Blackwater Solar LLC

Address c/o Clenera, LLC, Attn: Admin Dept, PO Box 2576

Boise Street ID 83701
City State Zip

REAL ESTATE HOLDINGS TO BE AFFECTED

Location or Address	Description
Sussex County tax parcels 78-A-19 and 60-A-15	See attached deeds

OTHER OWNERS OF AFFECTED REAL ESTATE

(Not Required for Corporation whose stock is traded on a national or local stock exchange or having more than 500shareholders.)

Name of Individuals Corporation/Partnership Business Association	Address
Drumwright Property, LLC	9160 Granite Knoll Court, Las Vegas, NV 89129

Does any member of the Sussex County Planning Commission or governing body have any interest in such property, either individually, by ownership of stock in a corporation owning such land, partnership, as the beneficiary of a trust, or the settlor of a revocable trust, or whether a member of the immediate household of any member of the Planning Commission or governing body has any such interest? Yes No

If yes, names of members:

I do solemnly swear that the foregoing statement(s) and attachment(s), if any, are complete, correct and true.

Applicant: Jason Ellsworth, Chief Executive Officer of Clenera Holdings, LLC, indirect manager of Blackwater Solar LLC
Printed or Typed Name

Applicant: [Signature]
Signature

Date: 11/27/2023

State of Idaho
County of Ada

Subscribed and sworn to before me Tammi Sevy

A Notary Public in and for the County of Ada, State of Idaho, this 27 day of November, 2023.

[Signature]
Notary Public
My Commission Expires May 11, 2026

TAMMI SEVY
Notary Public - State of Idaho
Commission Number 20201687
My Commission Expires May 11, 2026



STAFF REPORT

Conditional Use Permit Application Review for Blackwater Solar Sussex County, Virginia

Report Date: March 20, 2024

Planning Commission/Board of Supervisors Joint Hearing Meeting Date: March 25, 2024

APPLICATION SUMMARY

Project:	Blackwater Solar, 600 MW and 400 MW Battery Energy Storage System (BESS)
Affected Acreage:	Total Project Area: 8,355 Development/Disturbance Project Area: 4,800 acres Area Under Panel: 1,500 acres
Location:	The proposed project is located on property in the Wakefield Planning Area approximately .5 mile from the Town of Wakefield at its closest point to town limits on Courtland Road (Rt. 628), and properties located in the area of Brittles Mill Road (Rt. 620), Barrett Church Road (Rt. 605), Turkey Pen Road (Rt. 729), Cedar Sign Post Road (Rt. 622), Walter Lanier Road (Rt. 740), Union Hill Road (Rt. 606), Beaverdam Road (Rt. 606), and Union Camp Drive (private) in the Wakefield Election District. The project is bordered on the northern side by Route 622 and on the south by the Southampton County and Sussex County line.
Parcel Record Numbers:	18 parcels: 115-A-12; 115-A-19; 132-A-2; 132-A-6; 60-A-15; 77-A-8; 78-A-11; 78-A-12; 78-A-13; 78-A-17A; 78-A-18; 78-A-19; 94-A-5; 95-A-1; 96-A-12; 132-A-3; 114-A-1; 13-5
Proposal:	Conditional Use Permit for Utility-Scale Solar Facility; pending the rezoning of two (2) parcels from PUD to A-1
Application Submitted:	May 5, 2023 Revised November 27, 2023
Applicant:	Blackwater Solar, LLC
Representative:	Ed Rumler Clenera, LLC Ed.rumler@clenera.com 517-292-9476
Owners:	Westervelt Timber, LLC; Assamoosick Properties, LLC; Drumright Property, LLC; Holt Livesay; Joseph A Stephenson; Carroll Benjamin & Diane & Rossie/Carroll Edwin Benjamin Life Estate; Coxe Timberlands-Caboose VA, LLC; Russel Edward Holland



PROPOSED DEVELOPMENT

The Applicant is seeking a Conditional Use Permit (CUP) to construct a 600 megawatt (alternating current) photovoltaic solar energy generation facility, along with a 400 MW battery energy storage system (BESS). The project is located on 18 parcels, or portions thereof, totaling 8,355 acres, while the fenced area of development/disturbance totals approximately 4,800 acres. **(It is important to note that the original CUP application contained in the notebooks distributed to the Planning Commission and Board of Supervisors requested only 4,800 acres be included in the use permit. However, a revised application is attached to this report that includes the entire 8,355 acres, necessary to encompass required setbacks and additional areas the Applicant has offered to enhance the project buffer.)**

The project infrastructure will consist of approximately 1.4 million solar photovoltaic modules (PV panels) mounted on steel racking structures, inverters, a transformer, and control cabinet, switch gear, meter, interconnection, and security fencing. PV panels will cover 1,500 acres or approximately 18% of the total project area or 31% of the development/disturbance area. The racking system piles will be approximately 10 feet deep, and the wires will be buried 36 to 48 inches deep.

Energy generated will be connected to the grid at an existing 500 kV transmission line on the north side of the Project boundary. A new utility substation will be constructed to interconnect the project to the 500 kV line. The substation will be located within the project boundary but will be serviced, maintained, and owned by Dominion Energy. The project has two pending interconnection applications with PJM – one for the solar facility, and one for the battery storage facility.

The project is setback over 300 feet from surrounding dwellings and 150 feet from roads, relying on existing vegetative buffers for screening. The project will be setback from delineated wetlands by an undisturbed 50-foot buffer. The Applicant proposes 31 vehicular access points from the existing road network for access to the entire project area and will construct service roads within the project area with connecting access points to the PV Pods. The PV Pods will vary in size between 3 and 150 acres, with an average pod size of 50 acres. Each pod will be surrounded by a chain link fence, inside which are parallel rows of solar panels, support structures and racking, stormwater basins, electrical collection lines, transformers, inverters, and access roads. The Applicant has indicated that small to medium-sized animals will have access to the full site through wildlife-friendly fencing, while larger wildlife will have consistent access to over 40 miles of wildlife corridors and over 2,000 acres of preserved open space.

The Applicant expects solar construction to progress in three phases– each of which will comprise 200MW of solar. Phase 1 construction is scheduled to begin in the 3rd Quarter of 2025 and is expected to last 24 months. The timeline from the beginning of Phase 1 to the completion of construction is expected to take 3 years. The proposed battery energy storage facility will be constructed during the final 9 to 12 months of the scheduled construction period, to be finished at the same time as the full facility is operational in mid-2028.

According to the Applicant, the project will create approximately 200 construction positions monthly for the duration of construction, and will generate roughly \$130 million in additional



revenue from higher real property value assessment, and machine and tools taxes on capital investments for the project.

EXISTING CONDITIONS AND ZONING

The majority of the parcels subject to the project proposal are zoned A-1, General Agricultural, and 2 of the parcels are zoned PUD, Planned Unit Development. A utility-scale solar facility is not allowed as use within the PUD zoning district; therefore, the Applicant is seeking to rezone the PUD parcels to A-1, 78-A-19 and 60-A-15, and has filed a separate, concurrent application for rezoning in conjunction with the Conditional Use Permit request.

The project area is relatively flat and will require minimal grading. The Applicant has indicated that the development/disturbance area of the project, or at least 4,782.8 acres thereof, is comprised of the following uses: 4,040.2 acres or 84.5% Commercial Pine Plantations, 605.1 acres or 12.7% Mixed Forest, and 137.5 acres or 2.9% Traditional Agriculture. The remainder of the development/disturbance area and the parcel project area is understood to be comprised of similar uses.

The County's Comprehensive Plan identifies the project to be located within the Wakefield Small Area Plan area, with a majority of the project areas designated as Agricultural under future land use and a small area of the northwestern portion designated as Residential.

ADJACENT AND SURROUNDING USES

The project area abuts 118 parcels that are zoned A-1, including residences, agricultural and forestry uses, and a century farm. The project area is adjacent to the Big Woods Wildlife Management Area and the Airfield 4-H Conference Center, and is within four (4) miles of the Waverly Solar project and 0.5 miles from the town boundary of Wakefield. The Applicant has indicated that the proximity of the project to the Town "is necessary to comply with the requirement for proximity to the transmission line."

ENVIRONMENTAL AND NATURAL RESOURCES

The Applicant contacted State agencies for a review of potential natural resources in and around the project area. The Virginia Department of Wildlife Resources (VDWR) identified the site as a potential habitat, and several species have been observed in the vicinity of the site, including two bats (Big-Eared, Tri-colored), three birds (Red-cockaded woodpecker, Loggerhead Shrike, Bachman's Sparrow), and three aquatic animals (Mabee's Salamander, Roanoke Longperch, Blackbanded Sunfish). The Application notes that "Commercial timber operations are unlikely to make a suitable habitat for the red-cockaded woodpecker. According to The Nature Conservancy, the red cockaded woodpecker makes habitat in living trees that are 60 – 100 years old, and they prefer open forest cultivated by regular fires. Whereas commercial loblolly is generally cut before maturing to 60 years, and not often subject to controlled burns."

The Department of Conservation of Recreation (DCR) flagged two Natural Heritage sites – The Drumwright Pond conservation site (northeast part of the project, near the transmission line), and the Manry Sinkhole Ponds N – Airfield Pond conservations site. According to documentation presented, the Drumwright Pond is not considered a critical conservation site. Airfield Pond is listed as a critical conservation site for three natural heritage resources.



Additionally, the project will have 0.8 miles of shared border with the Big Woods Preserve; a 150-foot vegetative buffer will provide screening for the project along shared roadways.

Prior to submitting the formal application, the Applicant held community meeting(s) and based on feedback from the local community and DCR, the Applicant removed over 1,300 acres of land from the area of the Airfield Pond Conservation Site and to accommodate community concerns regarding proximity to the 4H Center and impacts to Turkey Pen Road.

Based upon a review of the Virginia Department of Conservation and Recreation's Natural Heritage Data Explorer (NHDE) there are Ecological Cores within and surrounding the project site ranking as General, Moderate, and High (there are no areas ranking as Very High or Outstanding), and areas within and surrounding the project site ranking from Average to Outstanding for Forest Conservation Values (with Outstanding ranked areas generally following wetland and stream areas). While there are six (6) wetland crossings proposed based upon the Concept Plan, these are expected to be designed consistent with applicable state and federal regulations and the project otherwise excludes significant disturbance to any areas of wetlands, proposing a 50' conservation buffer adjacent thereto; Staff has recommended that this be increased to a 100' setback with 50' buffer.

CULTURAL AND HISTORIC RESOURCES

According to the Application's Environmental Resource Impact Analysis, there are two previously recorded architectural resources and one previously recorded archaeological resource within the project area, along with 226 architectural resources and 39 archaeological resources within three miles of the project. Two of the architectural resources (DHR ID # 087-5552 and 091-0011) have been evaluated by VDHR and are listed National Register of Historic Places (NRHP) and the Virginia Landmarks Register (VLR). Ten of the architectural resources (DHR ID #320-0001, 091-5058, 091-0103, 087-5492, 091-5062, 091-5071, 091,0098, 320-5078, 320-0002, and 091-5098) are evaluated as eligible or potentially eligible for listing on the NHRP and VLR. The remaining architectural and archaeological resources have been determined not eligible or have not yet been evaluated.

Based upon a review of the Virginia Department of Historic Resources' Virginia Cultural Resource Information System (VCRIS), there are three (3) historic resources located along Courtland Road potentially affected by the project, Bain's Store/Coker-Bain Store (091-0103; eligible or potentially eligible), Marks House (091-0102), and the Shady Oak Farm farmhouse (091-5065) located on project parcel 78-A-18. Additionally, there are two (2) historic resources located along Brittles Mill Road potentially affected by the project, an abandoned house (091-5059) and the Wakefield Community Hunt Club/Wakefield Sportsmens Club (09-5058; eligible or potentially eligible). Finally, at the southern end of the project, the Spivey Cemetery (091-5122) located along Barrett Church Road and Union Hill United Church of Christ (091-5123) along Union Hill Road are potentially affected by the project.

ZONING ORDINANCE

The Application was reviewed to determine completeness and compliance with respect to the County's Zoning Ordinance, specifically to the requirements contained in Article VII, Solar and Battery Facilities. A memorandum from the Berkley Group, dated January 4, 2024, indicated that the Application as proposed and revised was both complete and compliant with



respect to applicable submittal requirements of the Zoning Ordinance.

COMPREHENSIVE PLAN

The County's 2004-2005 Comprehensive Plan serves as a policy document to inform planning and land use decision making. The Comprehensive Plan is not a regulatory document but should be used when applicable to evaluate projects and applications. As part of the Comprehensive Plan, most recently the County adopted Small Areas Plans as an addendum to the Plan. The subject properties are located in the Wakefield Small Area Plan, which contains the following analysis and considerations:

The future vision for the Wakefield Planning Area is as follows:

- *The Wakefield Planning Area is known for its rural character, significant cultural contributions, and abundant natural resources that will require a focused effort to preserve and further develop. Strengthening and diversifying the economy will require creative strategies to maximize the overall potential of the Planning Area. The presence of a high-volume transportation corridor, along with well-established commercial and public uses, available developable land, and large amounts of preserved natural lands makes Wakefield a great place for economic activity and investment.*
- *This vision builds upon a future land use analysis that prioritizes protecting the area's richest natural and cultural resources while also expanding commercial activity and residential development in appropriate locations. The full potential of the Wakefield Planning Area can be realized by capitalizing on the economic potential of travelers and also expanding job opportunities and improving quality of life for residents. Proper investment will also expand the County's tax base, leading to improvements in schools, social services, public facilities, and other community amenities.*
- *Future land use recommendations include the addition of some residential development near the Town of Wakefield as well as targeted growth in commercial and public uses.*
- *The U.S. 460 corridor should support new commercial and light industrial development while the outlying portions of the Planning Area are retained in their current undeveloped state. As a result, future land use in the Wakefield Planning Area will ensure that new and existing development avoids conflict with the existing natural features and transportation corridors that define this portion of Sussex County.*
- *The Wakefield Planning Area contains a wide variety of environmental features, including wetland areas, flood zones, riparian areas, and large forested tracts, that play an important role in plant and animal species diversity as well as natural water system filtering. The Planning Area already has a large amount of land that is actively managed and protected for its unique environmental features. Given the prevalence of natural features throughout the County, environmental conservation is a relevant consideration for all future land use categories discussed in this plan.*



New development should be guided towards previously disturbed locations and away from the boundaries of these preserved lands. Most of the land between U.S. 460 and Jerusalem Plank Road (State Route 35) is heavily forested and provides important natural habitat and forest resources that should be protected as much as possible through the County's land use tools.

- The County must ensure that development is limited near these environmental areas and should encourage low-impact development strategies and stormwater management improvements to protect habitat and water quality. This includes directly to the west of the Town of Wakefield where the Seacock Swamp has flood zones and riparian zones in an area that could eventually be developed. Additionally, farmers are encouraged to follow best management practices and take advantage of conservation and environmental programs as promoted by the Virginia Department of Agriculture and Consumer Services (VDACS).*
- Protecting agricultural and forestry uses is central to maintaining the rural character that defines much of the Planning Area outside of the U.S. 460 corridor. The primary land use in the Wakefield Planning Area will continue to be rural in nature and include large tracts of agricultural, forest, and open land uses. These areas are labeled as Agricultural on the future land use map. The main purpose of this land use classification is to facilitate existing and future farming operations, allow for expansion of farm related activity, reduce the effects of soil erosion, and protect watersheds to promote the continuation of farming and forestry uses that are among the most important sectors of the economy.*
- In planning for active agricultural and forestry use of parcels in the rural area, the County should consider the full scope of modern farming activities, including agritourism, on-site sales, food preparation, and events, and modify local regulations to more easily permit all activities that can help farmers maintain a profitable enterprise. Such activities have the added benefit of drawing visitors to the rural areas of Sussex County for tourism as well as providing additional income to farming operations. Large parcels will remain necessary for sustainable agricultural enterprise in the rural area.*
- Areas that are in forest preservation programs should be maintained to support the ecological balance between agriculture and forest. Private landowners, the Department of Forestry, the Department of Wildlife Resources, and The Nature Conservancy all have different management priorities. Where public access is permitted, the County should promote these important resources to be enjoyed for recreational and eco-tourism opportunities in addition to supporting the economic and natural benefits that these lands provide.*
- The Town of Wakefield and the immediate surrounding properties are the only locations with clustered residential land use in the Wakefield Planning Area. As a result, the proposed residential growth areas are concentrated around the existing clusters of dwellings outside of the Town and along routes that lead into the Town.*
- It is recommended that the continuation of the current trend toward linear housing development on routes leading into Town be limited. Where linear development is*



inevitable, shared driveways can be designed to reduce safety issues that arise with multiple single driveway access points.

- *Additionally, the County should work to develop parts of the proposed Drumwright Mill Subdivision property. While the full scale of that approved development may not still be feasible, the County should work with the current landowner of the property to promote the residential development of portions of the site that is coordinated with County utilities and services.*

The Wakefield Small Area Plan designates the Future Land Use of the majority of the area under the application as Agricultural, with a small area of the northwestern portion designated as Residential.

Additionally, the Comprehensive Plan was amended on February 17, 2022 to adopt policy for solar and battery storage facilities; adopted policy is as follows:

23. Utility-Scale Solar Facilities

As used in this Comprehensive Plan, a utility-scale solar facility is a facility that generates electricity from sunlight which will be used to provide electricity to a utility provider or a large private user with a generating capacity in excess of one megawatt alternating current (1 MWAC). Sussex's abundant agricultural and forest land combined with its electrical infrastructure and transportation system appear to be attractive to the solar industry. These facilities are an industrial scale land use that occupy significant acreage. Many utility-scale solar facilities are located on agricultural or forested land that may have had other future land use potential or land use designations.

The County will consider utility-scale solar facilities as a primary use in districts zoned agricultural or industrial with preference for brownfields and County-owned capped landfills. The following site features should be addressed to mitigate the potential negative impacts of utility-scale solar facilities on County land use patterns as part of the evaluation of a Conditional Use Permit (CUP) application:

- *the total size shall be 100 acres or more but less than 5,000 contiguous acres;*
- *large contiguous projects are preferred over small decentralized or large discontinuous projects to prevent land fragmentation;*
- *laid out appropriately on the project parcels;*
- *laid out with no more than 65% equipment and building coverage;*
- *located outside planning areas or community hubs;*
- *located outside forested areas to preserve forest resources;*
- *located outside prime agricultural land;*
- *further than three (3) miles from any village or town boundary;*
- *further than two (2) miles from other existing or permitted solar facilities; and*



- *located to minimize negative impacts in proximity to residences; historic, cultural, recreational, or environmentally-sensitive areas; and scenic viewsheds.*
- *located less than or equal to one (1) mile from a transmission line.*

Battery energy storage facilities are also an industrial land use but require more safety requirements than solar facilities. The County will consider battery facilities as:

- *an accessory use to utility-scale solar facilities, other energy generation facilities, or substations; or*
- *a primary use on a parcel contiguous to utility-scale solar facilities, other energy generation facilities, and substations.*

STAFF REVIEW AND COMMENTS

The subject Application is seeking a Conditional Use Permit for a utility-scale solar facility and battery energy storage facility. For solar projects, the planning commission is not required to make a finding that the project is in substantial accord with the comprehensive plan. Instead, pursuant to 15.2-2316.9, a siting agreement, if approved by the Board of Supervisors, fulfills the requirement for a 2232 review. The Applicant has initiated the negotiation a siting agreement pursuant to Va. Code Section 15.2-2316.6 et seq., for separate consideration by the Board of Supervisors.

Further, per Sections 34-913 and 34-914 of the Zoning Ordinance, conditions may be imposed on Conditional Use Permits for utility-scale solar and battery energy storage facilities that include, but are not limited to, the following:

- A solar facility shall be constructed, maintained, and operated in substantial compliance with:
 - The development standards under this article.
 - The approved concept plan.
 - Any other conditions imposed pursuant to a conditional use permit.
- The board of supervisors may, in its sole discretion, by conditional use permit, waive or modify requirements set out in this article for solar or battery storage facilities, based on unique site conditions, if it finds that such waiver or modification promotes good land use planning and is compatible with surrounding land uses, and as long as the project still otherwise complies with applicable state law and local ordinances.
- Dedication of real property of substantial value; or substantial cash payments for or construction of substantial public improvements, the need for which is not generated solely by the granting of a conditional use permit, so long as such conditions are reasonably related to the project.
- Other reasonable conditions as permitted by state law and as otherwise provided for in this Article.



Staff has reviewed the proposed project considering the relevant sections of the County's Zoning Ordinance as well as the Comprehensive Plan and offers the following for consideration by the Planning Commission and Board of Supervisors.

Comprehensive Plan

Based upon policies pertaining to the Wakefield Planning Area as part of the Wakefield Small Area Plan, and future land use designations, consideration should be given to whether the proposed project limits or encumbers anticipated residential development or uses near the Town of Wakefield, has the potential to negatively impact environmental features throughout the project area, or otherwise negatively impacts the rural character or agriculture and forestry uses in the area.

With regard to the specific policies for utility-scale solar and battery energy storage facilities, the Planning Commission and Board of Supervisors should consider the following:

1. *The County will consider utility-scale solar facilities as a primary use in districts zoned agricultural or industrial with preference for brownfields and County-owned capped landfills.*

With the exception of the two parcels zoned PUD for which a rezoning is being sought, the project parcels are zoned A-1; however, no parcels are considered to be brownfields nor County-owned capped landfills.

2. *The following site features have been reviewed and should be mitigated for potential negative impacts of utility-scale solar facilities on County land use patterns:*

- *the total size shall be 100 acres or more but less than 5,000 contiguous acres;*

The project is greater than 100 acres. In total, the project has an area of 8,354.8 acres (approximately 8,355 acres), which is inclusive of the active development area totaling approximately 4,800 acres.

- *large contiguous projects are preferred over small decentralized or large discontinuous projects to prevent land fragmentation;*

The project is determined to be a large contiguous project and does not constitute a small decentralized project.

- *laid out appropriately on the project parcels;*

Generally, as proposed and laid out on project parcels, staff is of the opinion that the project is appropriately laid out based upon the proposed 150' perimeter buffer/setback. However, staff is of the opinion that the proposed 50' wetlands setback is not sufficient and would recommend that a 100' setback for fencing and equipment be required, to include a 50' buffer from wetlands. Staff would also recommend that a condition be imposed to limit fenced areas to no more



than 150 acres and the average fenced area be no greater than 50 acres, as proposed, to ensure that wildlife mobility is not significantly encumbered.

- *laid out with no more than 65% equipment and building coverage;*

Based upon the proposed 8,355-acre project area and panel coverage of 1,500 acres, the proposed coverage is approximately 18%.

- *located outside planning areas or community hubs;*

The majority of the project is designated Agricultural with the exception of the northern tip of the project area which is designated for residential development.

- *located outside forested areas to preserve forest resources;*

Based on information provided by the Applicant, of the development area, approximately 4,040.2 acres or 84.5% consists of Commercial Pine Plantations and 605.1 acres or 12.7% consists of Mixed Forest.

- *located outside prime agricultural land;*

According to the Application materials, of the development area, approximately 137.5 acres or 2.9% consists of Traditional Agriculture land use. No information has been provided indicating the area comprised of prime agricultural land or soils as identified by the USDA or comparable entity.

- *further than three (3) miles from any village or town boundary;*

The Applicant states that portions of the proposed project area is approximately one-half (0.5) mile from the Town of Wakefield. The Applicant has indicated that this is necessary to comply with the policy criteria that portions of the project be located less than or equal to 1 mile from a transmission line. The Applicant further estimates that 70% of the project as presented is outside of the 3-mile limit and that most of the remaining project is at least 4 miles away from the town.

- *further than two (2) miles from other existing or permitted solar facilities;*

The project is located more than two (2) miles from other existing or permitted solar facilities within the County.

- *located to minimize negative impacts in proximity to residences; historic, cultural, recreational, or environmentally-sensitive areas; and scenic viewsheds.*

The project's proposed 150' perimeter buffer/setback, as well as 300' setback from residences, work to ensure consistency with this criteria. The Applicant has further indicated that "over 1,300 acres of environmentally sensitive acreage near recreational areas (Big Woods and the 4H Center)" has been removed from the initial project area. As noted, while the Applicant has



proposed a 50' wetlands setback, staff is of the opinion that this is not sufficient to minimize negative impacts to environmentally sensitive areas and would recommend that a 100' setback for fencing and equipment be required, to include a 50' buffer from wetlands.

- *located less than or equal to one (1) mile from a transmission line.*

The project is located less than 1 mile from a transmission line.

Zoning Ordinance

The purpose of the County's Zoning Ordinance is to generally promote the health, safety or general welfare of the public and of further accomplishing the objectives of the Code of Virginia, § 15.2-2200, and to further the 11 specific purposes as referenced in the Zoning Ordinance, as follows:

- *To reduce or prevent congestion in the public streets;*

The project proposes to utilize 31 vehicular ingress/egress points once operational, and staff anticipates that many or most of these will be utilized during the construction phases. Given the number of access points and the conditions of roadways accessing areas of the project, the Applicant has offered conditions to ensure appropriate construction traffic mitigation and the safety of the general public. The Applicant has indicated that there would be no delivery traffic on Turkey Pen Road and that they will provide a \$250,000 road repair bond; it is recommended that these commitments be incorporated within conditions, however, it is recommended that any amount of the road repair bond be subject to the approval of the Zoning Administrator, who may rely on the opinion on a third-party.

- *To facilitate the creation of a convenient, attractive and harmonious community;*

As noted, the project proposes buffers and setbacks that should ensure consistency with this purpose.

- *To facilitate the provision of adequate police and fire protection, disaster evacuation, civil defense, transportation, water, sewerage, flood protection, schools, parks, forests, playgrounds, recreational facilities, airports and other public requirements;*

As noted, given the number of access points and the conditions of roadways accessing areas of the project, conditions would be warranted to ensure appropriate construction traffic mitigation and the safety of the general public. The Applicant has indicated that there would be no delivery traffic on Turkey Pen Road and that they will provide a \$250,000 road repair bond; it is recommended that these commitments be incorporated within conditions, however, it is recommended that any amount of the road repair bond be subject to the approval of the Zoning Administrator, who may rely on the opinion on a



third-party.

- *To protect against destruction of or encroachment upon historic areas;*

There are identified historic resources within a 3-mile area and at least one potential resources is located on a project parcel; however, staff is of the opinion that there are no known project activities that would destroy or encroach upon historic resources.

- *To protect against one or more of the following: overcrowding of land, undue density of population in relation to the community facilities existing or available, obstruction of light and air, danger and congestion in travel and transportation, or loss of life, health, or property from fire, flood, impounding structure failure, panic or other danger;*

As noted, given the number of access points and the conditions of roadways accessing areas of the project, conditions would be warranted to ensure appropriate construction traffic mitigation and the safety of the general public. The Applicant has indicated that there would be no delivery traffic on Turkey Pen Road and that they will provide a \$250,000 road repair bond; it is recommended that these commitments be incorporated within conditions, however, it is recommended that any amount of the road repair bond be subject to the approval of the Zoning Administrator, who may rely on the opinion on a third-party.

- *To encourage economic development activities that provide desirable employment and enlarge the tax base;*

The project will undoubtedly enlarge the tax base, however, in and of itself it will not likely encourage long-term economic development activity that provides for long-term employment opportunities. The development of utility-scale solar facilities may result in short-term construction employment opportunities, and may result in increased economic activity during the period of construction.

- *To provide for the preservation of agricultural and forest lands and other lands of significance for the protection of the natural environment;*

As referenced, based on information provided by the Applicant, of the development area, approximately 4,040.2 acres or 84.5% consists of Commercial Pine Plantations, 605.1 acres or 12.7% consists of Mixed Forest, and 137.5 acres or 2.9% consists of Traditional Agriculture land use (No information has been provided indicating the area comprised of prime agricultural land or soils as identified by the USDA or comparable entity). There is approximately 3,555 acres outside of the development area that will be undeveloped, much of which is existing forested area that will be retained and preserved as part of the project.



Additional Comments

Given the size and scale of the project, existing County staffing resources may be strained or insufficient to appropriately manage and monitor the project during development and operation. A condition addressing the need for third-party inspections is recommended by Staff to mitigate this impact.

STAFF RECOMMENDATION

Based upon a review of the Application and the Staff comments provided herein, staff recommends approval of the requested Conditional Use Permit with conditions to ensure consistency with applicable Comprehensive Plan policies and the purposes of the County's Zoning Ordinance. Recommended conditions are attached.

Attachments:

- A. Staff Recommended Conditions
- B. Revised CUP Application;
- C. Blackwater Solar Review Comments – Berkley Group Completeness and Compliance Review dated January 4, 2024 and Outside Agency Review Comments; and
- D. Public comment(s) received to date.

1. The Applicant shall develop, construct, operate, and maintain the site in substantial conformance with the conceptual plans (titled “Concept Plan, Blackwater Solar,” plan sheets C4.0 thru C4.8, dated April 27, 2023), inclusive of the Application revision dated “Revised July 5, 2023”, all assurances and commitments made within the Application materials, and the conditions imposed on the issued conditional use permit, as determined by the Zoning Administrator. Substantial conformance will be determined by the Zoning Administrator based on his/her review of the record. Deviations determined not to be in substantial conformance with the conceptual plans, or consistent with these conditions as may be necessary or required, shall require review and approval as an amendment to the conditional use permit, following the process for the granting of a conditional use permit. As used in these conditions, the term "Applicant" shall include the terms "Applicant, Owner, Developer, or Operator," and the successors and assigns thereof, the term “Zoning Administrator” shall include the designee of the Zoning Administrator, and the terms “Project” and “Solar Facility” shall include the facility in its entirety, including the battery energy storage facility unless the context clearly dictates otherwise.
2. Project capacity shall be limited to a maximum of 600 MW for the solar facility and 400 MW for the BESS facility.
3. The active developed area of the site, within the fenceline, shall be limited to 4,800 acres. All security fencing shall be installed behind the vegetated buffer.
4. The Applicant shall give the County written notice of any change in ownership or entities responsible for operations or asset management of the project within thirty (30) days after the change.
5. Prior to or in conjunction with site plan review, the Applicant/Owner/Developer shall submit details on the utility connections between noncontiguous portions of the project, including secured easements, to the Zoning Administrator for approval. Approval of the site plan or subsequent permits shall not be granted without prior approval of these connections by the Zoning Administrator, or without the existence of executed easements for the connections.
6. To accommodate wildlife crossing of the site, the Applicant shall refer to the Virginia Department of Wildlife Resources Commission’s most recent Solar Energy Facility Guidance in the design of the site plan, working with the Zoning Administrator to meet the intent, if not the letter of the Guidance. Regardless, individual fenced areas shall be limited to a maximum of 150 acres, and the average fenced area shall be no greater than 50 acres.
7. Setbacks shall be as required by the County’s Zoning Ordinance, except where proposed within the application and conceptual plans to be greater. There shall be no setbacks between internal lot lines between parcels in the project area.
8. For all streams and wetlands there shall be a minimum 50’ undisturbed buffer and 100’ setback for all installed equipment unless a greater setback is provided within the

application and conceptual plans. Erosion control and stormwater control measures are allowed to be located within the 100' setback. Required buffers shall remain undisturbed.

9. The project shall provide for a 150' perimeter setback, with encroachments allowed only where depicted on the Concept Plan. All required buffers shall be comprised of existing natural vegetation and there shall be minimal removal of existing buffer vegetation adjacent to road entry points. Where gaps in existing natural vegetation within a required buffer area require supplemental plantings to facilitate effective screening or in the event existing vegetation or landforms providing the screening are disturbed, the Zoning Administrator may, in connection with site plan review and approval, require buffers to be supplemented with additional plantings of native and/or pollinator species where compatible with site conditions. Supplemental plantings of trees (approximately six (6) feet in height and 2.5 inches in caliper at time of planting) and shrubs shall be installed as required by the Zoning Administrator. A staggered double row of trees/shrubs will be planted on 10-foot centers in the exterior 25 feet of the screening area. Tree and shrub seedlings shall be planted in the remaining screening area. Buffer plantings, both existing and supplemental planting, shall be maintained in good health to ensure sufficiency of the screening, as determined by the Zoning Administrator; damaged or deceased plant materials shall be replaced within a reasonable time, dictated by best practices, as determined by the Zoning Administrator.
10. Prior to the operation of the facilities, the Applicant shall establish one or more easements to the County for all buffer areas (perimeter and wetland buffers), providing the County with unencumbered access to these areas for maintenance, stewardship, and fire protection. Such easements shall be established to expire upon decommissioning of the facility.
11. A separate security shall be posted for the ongoing maintenance of the project's land cover and vegetative buffers in an amount deemed sufficient by the Zoning Administrator as set forth on Schedule A attached hereto and provided by an issuer in a form and amount acceptable to the Zoning Administrator (who may rely on the opinion of a third-party). For areas of project parcels to remain undeveloped and which are forested, prior to approval of the certificate of occupancy (or equivalent) the Applicant shall submit a forest management plan outlining how these areas will be actively managed by the Applicant during the operation of the facility consistent with best practices to limit the wildfire risk.
12. As part of the site plan review, the Applicant shall be required to submit a construction management/construction mitigation plan, to be reviewed and approved by the Zoning Administrator. At a minimum this plan shall address and/or include:
 - a. A schedule for two (2) public open houses prior to the commencement of construction activities.
 - b. A construction schedule to include construction of the proposed substation to be constructed by Dominion Power.
 - c. Traffic control methods for all public roads to be used for ingress/egress (in coordination with the VDOT prior to initiation of construction) shall include, at a

minimum, plans and procedures for lane closures, signage, flagging, and site entrance design.

- d. Prohibition on construction delivery traffic on Turkey Pen Road.
 - e. Coordination with VDOT prior to initiation of construction on the appropriateness of the speed limit on any public access road and support a speed limit reduction, if necessary.
 - f. Site access planning, including procedures for directing and coordinating employee and delivery traffic. Construction Traffic shall be limited to 7:00 am to 9:00 pm, Monday through Saturday, or as may be approved by the County Administrator upon good cause shown by the Applicant. In all cases, construction delivery traffic shall be prohibited on Turkey Pen Road.
 - g. Site security; security measures shall be implemented prior to commencement of construction activities.
 - h. Lighting; during construction of the 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.
 - i. Hours of construction. Driving of posts shall be limited to 7:00 am to 6:00 pm, Monday through Saturday. Driving of posts shall be prohibited on state and federal holidays. The Applicant may request permission from the County Administrator to conduct post driving activity on Sunday, but such permission will be granted or denied at the sole discretion of the County Administrator, after consulting with the Board of Supervisors. All other construction activity shall be permitted Monday through Saturday. The Applicant may conduct construction activity on Sunday, in accordance with the County's Noise Ordinance, so long as such activity does not occur within 500 feet of any residential dwelling.
 - j. Mitigation of dust.
 - k. Mitigation of burning operations.
 - l. Plans for staging and storage of materials and parking. During construction, the setback may be used for staging of materials and parking. No material and equipment laydown area, construction staging area, or construction trailer shall be located within 300 feet of any property containing a residential dwelling.
13. The Applicant shall submit a Construction Traffic Management Plan (CTMP) to include entrances and comply with all Virginia Department of Transportation conditions for the traffic management plan during construction and decommissioning of the Solar Facility.
14. The Applicant shall be responsible for repairing any damage to roadways occurring during development/construction or following commissioning of the project, or any portion thereof. Prior to the commencement of development/construction activities, the County and the Applicant shall agree to the existing state of applicable roadways, to be documented by video furnished by the Applicant in coordination with the County, or by the County with costs assumed by the Applicant. During development/construction, the roadways shall be monitored for damage, and the Applicant, once notified by the County of damages, shall make repairs caused by construction traffic at the direction of the County Administrator

within 30 days of notice. After construction activities are completed, the roadways will be evaluated for damage as measured against the condition prior to construction activity; the Applicant will be required to restore such roadways to equivalent or better condition as existed prior to commencement of construction activity.

15. Prior to approval of the site plan and commencement of construction, the Applicant shall provide a bond or other security, in a form and amount acceptable to the Zoning Administrator (who may rely on the opinion of a third-party) as set forth on Schedule A attached hereto, to cover 100% of the estimated costs of anticipated pre-construction improvements to be made to the public roads and/or public rights-of-way along the delivery routes, as well as the anticipated cost of repairs to be necessary during development. After pre-construction improvements have been completed, the amount of the bond/security shall be reduced equivalent to the costs of the pre-construction improvements.
16. The Applicant shall coordinate with the County's Sheriff Department prior to initiation of construction on speed monitoring plans and devices.
17. As part of the site plan review, the Applicant/Owner/Developer shall be required to submit a grading plan, to be reviewed and approved by the Zoning Administrator. A bond or other security, from an issuer and in a form approved by the Zoning Administrator, will be posted for the grading operations. The Project shall be constructed in compliance with the Grading Plan. At a minimum this plan shall address:
 - a. Clearly show existing and proposed contours;
 - b. Note the locations and amounts of topsoil to be removed (if any) and the percent of the site to be graded;
 - c. Limit grading to the greatest extent practicable, and except as may be necessary to accommodate anticipated and required stormwater management, by avoiding development of steep slopes (those greater than 15%);
 - d. An earthwork balance will be achieved on-site with no import or export of soil except for importing specific quality soils required for construction. Excavated materials may be used for landscaping, berming/screening, or similar, or may otherwise be stockpiled on site and stabilized;
 - e. 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;
 - f. 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.
 - g. Provide for the installation of all stormwater and erosion and sediment control infrastructure ("Stormwater Infrastructure") at the outset of the project to ensure protection of water quality. Once all Stormwater Infrastructure is complete and approved by the VESCP authority, no more than 300 acres of the land disturbance areas as reflected on the Site Plan shall be disturbed without soil stabilization at any one time. Stabilization, for purposes of erosion and sediment control, shall mean the application

- of seed and straw to disturbed areas, which shall be determined by the VESCP authority.
18. The Applicant shall coordinate with state and federal agencies to avoid or limit impacts to the maximum extent practicable to any state and federally listed threatened and endangered species that may occur and have suitable habitats in the project area.
 19. The Erosion and Sediment Control plan shall comply with the most recent version of the Virginia Erosion and Sediment Control Handbook at the time of construction. The County will have a third-party review with corrections completed prior to the County 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 shall be posted for the construction portion of the project, to be provided by an issuer in a form and amount acceptable to the Zoning Administrator (who may rely on the opinion of a third-party) as set forth on Schedule A attached hereto.
 - a. To the maximum extent practicable, trees and stumps removed during the course of development shall be mulched on site, with such mulch to be used to mitigate and control stormwater runoff during construction.
 - b. To the maximum extent practicable, topsoil from the site should be maintained on site for use in areas where grading occurs that exposes unsuitable soils where erosion and sediment control vegetation will not take; soil analysis shall be performed to assess the adequate seed mix for exposed soils.
 20. The stormwater control plan shall comply with the most recent State policies and regulations at the time of design and construction. 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) provided by an issuer in a form and amount acceptable to the Zoning Administrator (who may rely on the opinion of a third-party) shall be posted as set forth on Schedule A attached hereto.
 21. Ground cover shall be native vegetation where compatible with site conditions and, in all cases, shall be approved by the Zoning Administrator, who may rely on the assistance of a third-party reviewer.
 22. Only EPA approved herbicides shall be used for vegetative and weed control at the solar energy facility by a licensed applicator. No herbicides shall be used within 150 feet of the location of an approved ground water well. The Applicant shall submit an herbicide land application plan prior to approval of the certificate of occupancy (or equivalent). The plan shall specify the type of herbicides to be used, the frequency of land application, the identification of approved groundwater wells, wetlands, streams, and the distances from land application areas to features such as wells, wetlands, streams, and other bodies of water. The operator shall notify the County prior to application of pesticides and fertilizers. The County reserves the right to request soil and water testing.

23. For permanent security fencing, a performance bond reflecting the costs anticipated for fence maintenance shall be posted as set forth on Schedule A attached hereto, provided by an issuer in a form and amount acceptable to the Zoning Administrator (who may rely on the opinion of a third-party).
24. No fence or similar barrier shall cross the main channel of any stream or through a wetland flagged by County staff on a site plan.
25. Permanent entrance roads and parking areas, as designated in the building permit application, will be stabilized with gravel, asphalt, or concrete to minimize dust, and impacts to adjacent properties. Roads internal to the site that are not part of ingress/egress to the site may be compacted dirt.
26. All physically damaged panels or any portion or debris thereof shall be collected by the solar facility operator and removed from the site or stored on site in a location protected from weather and wildlife and from any contact with ground or water until removal from the site can be arranged; storage of damaged panels or portion or debris thereof shall not exceed thirty (30) days.
27. The Applicant shall provide a bank letter of credit or a surety bond as a means of assuring payment of decommissioning costs as set forth on Schedule A attached hereto, provided by an issuer in a form and amount acceptable to the Zoning Administrator (who may rely on the opinion of a third-party). The letter or bond shall include language that failure to renew the current commitment, or provide a new guarantor acceptable to the County, at least ninety days prior to the termination date of the current commitment, will constitute an event of default. 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 Conditional Use Permit and shall be entitled to take all action to obtain the rights to the form of security.
28. The Applicant shall submit a final Decommissioning Plan to the County for approval in conjunction with the building permit. The Applicant shall reimburse the County's reasonable costs for an independent review and analysis by a licensed engineer of the initial decommissioning cost estimates. The Applicant will update the decommissioning costs estimate every five (5) years and reimburse the County's reasonable costs for an independent review and analysis by a licensed engineer of each decommissioning cost estimate revision.
29. Upon decommissioning, all physical improvements, materials, and equipment related to the solar facility, both surface and subsurface components, shall be removed in their entirety; this requirement, and decommissioning in general, will not apply to the substation, switchyard, and associated equipment located on Tax Parcel 60-A-15. The soil grade will also be restored following disturbance caused in the removal process. If the current or future landowner requests in writing that the fencing and/or materials greater than thirty-

six (36) inches below the surface be exempt from removal, the facility owner or operator shall provide an itemized list of exempt items and copies of request letters in the decommissioning land disturbance application for review and approval by the County.

30. Upon decommissioning, all access roads will be removed, including any geotextile material beneath the roads and granular material. Topsoil will be redistributed within areas that were previously used for agricultural purposes to provide substantially similar growing media as was present within the areas prior to access road construction. If the current or future landowner requests in writing that the access roads and associated culverts or their related material be exempt from removal, the facility owner or operator shall provide an itemized list of exempt items and copies of request letters in the decommissioning land disturbance application for review and approval by the County.
31. Within twelve (12) months after the cessation of use of the solar facility for electrical power generation or transmission, the Applicant, at their sole cost and expense, shall commence decommissioning of the solar facility in accordance with the Decommissioning Plan approved by the County. If the Applicant fails to decommission the solar facility within twenty-four (24) months, the property owners shall commence decommissioning activities in accordance with the Decommissioning Plan using the decommissioning security to fund such activities. Following the completion of decommissioning of the Solar facility arising out of a default by the Applicant, 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 proportionate acreage ownership of the Solar Facility. Upon completion of decommissioning and approval by the County, the County shall sign documentation releasing the decommissioning security.
32. If the Applicant or the property owners fail to timely decommission the Solar Facilities, 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 right to dispose of the Solar Facilities, equipment and materials on the property, without incurring any financial liability to the owner of the Solar facility or the property owner, and without obligation for the County to secure salvage value (if any) for the property disposed of. If applicable, any excess decommissioning security funds shall be returned to the current owners of the properties after the County has completed the decommissioning activities.
33. The County may enter the Project Site in accordance with Code of Virginia Section §15.2-2241.2. 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. The owners of the property shall execute a deed of easement prior to the County's issuance of a building permit.
34. If decommissioning is triggered for a portion of the Solar Facilities, then the Applicant will commence and complete decommissioning, in accordance with the Decommissioning Plan, for the applicable portion of the Solar Facilities; the remaining portion of the Solar

facility would continue to be operational and subject to the Decommissioning Plan when the time comes. Any reference to decommissioning the Solar facility shall include the obligation to decommission all or a portion of the Solar Facilities, whichever is applicable with respect to a particular situation.

35. Subject to the requirement that the County provide the Applicant with an estimate of the third-party costs prior the expense being incurred (when applicable County permit fees do not cover assumed costs), the Applicant shall reimburse the County its reasonable costs in obtaining independent third-party reviews as required by these conditions and for the review of the site plan (including all specific plans thereof), Erosion and Sediment Control plan, road repair and improvement, decommissioning cost estimates, and bi-annual inspections during operations to verify compliance with all permits and approvals. The Applicant shall also fully fund any temporary or permanent signage as requested or required by the County or the Virginia Department of Transportation (“VDOT”), as well as any costs associated with traffic planning or traffic mitigation.
36. The design, installation, maintenance, and repair of the Solar facility shall be in accordance with the most current National Electric Code (NFPA 70) available (2014 version or later as applicable) and State Building Code at the time of construction.
37. Inspections.
 - a. The Applicant will allow designated County representatives or employees access to the facility for inspection purposes during normal business hours with 24-hour notice.
 - b. The Applicant shall reimburse the County its reasonable costs in obtaining an independent third-party to conduct inspections required by local and state laws and regulations when those costs exceed the Applicant's building permit fee.
38. Emergency Access, Response, and Training.
 - a. The Applicant shall submit an Emergency Response Plan (the “ER Plan”) with the submission of the site plan. The ER Plan shall include fire suppression methods that can be immediately deployed during both the construction and operation of the project and shall include other measures external to the battery facility, but on the project site, developed in consultation with the County Fire Chief and intended to further mitigate any risk of spread of fire beyond the project site. The ER Plan shall also include a program of education and training to be provided for County emergency response staff covering onsite emergency response, as well as information on how the facility will be designed, constructed, operated, and maintained to allow for access by County emergency response staff in the event of an emergency.
 - b. Prior to the end of construction of the Project Site, the Applicant, shall hold training classes with the County's first responders (Fire and Rescue) to provide materials, education, and training on responding to on-site emergencies, to include the provision of information and any necessary equipment to allow first responders to gain access to

- any part of the facility in the event of an emergency. The training classes shall be scheduled with the assistance of the County's Public Safety Coordinator or designee.
- c. The Applicant shall provide on-going training as deemed necessary by the Public Safety Coordinator or designee.
 - d. In the event any upgrades or changes in technology associated with the Solar facility results in any change in emergency procedure, including the manner of access to the facility, the Applicant will notify the County Public Safety Coordinator, who may, at their discretion, schedule an additional training on the new equipment.
39. Compliance. The Solar facility shall be designed, constructed, and tested to meet relevant local, state, and federal standards as applicable.
40. The Conditional Use Permit shall be terminated if the solar facility does not receive a building permit within 24 months after the Applicant receives (a) any required state approvals; (b) any approvals of the regional transmission organization; and (c) any approvals required by the State Corporation Commission, but in no event more than thirty-six (36) months of approval of the Conditional Use Permit. The County Administrator, with a written request from the Applicant detailing the reasons for a requested extension, may approve a one-time extension of the 18 months to 24 months or a one-time extension of the thirty-six (36) months to forty-eight (48) months based upon his/her determination that any delay was not the result of actions of, or the inaction of, the Applicant.
41. If the Solar facility is declared to be unsafe, due to a violation of building or electrical codes, as determined by the fire marshal or building official, and the Applicant of the Facilities fails to respond in writing to such official within thirty (30) days, the County may revoke the right for the Facilities to continue operation until the unsafe condition is brought into compliance with the applicable building or electrical code. If the unsafe condition cannot be remedied within six (6) months, the Conditional Use Permit shall be terminated, and the Solar facility shall be decommissioned.
42. The Applicant shall provide the County with a list of capital equipment, including but not limited to solar photovoltaic equipment proposed to be installed, whether or not it has yet been certified as pollution control equipment by the State Corporation Commission or Virginia Department of Environmental Quality, and lists of all other taxable tangible property. Thereafter, on an annual basis, the Applicant shall provide the County with any updates to this information. Further, any information that is provided to the Virginia State Corporation Commission in the future, for the Commission's use in valuing such property for taxation purposes, shall also be provided to the County in a timely manner.
43. Power Purchase Agreement. The Applicant shall notify the County and its legal counsel upon its ratification of a power purchase agreement with a third-party providing for the sale of a minimum of eighty percent (80%) of the Solar Facility's anticipated generation capacity for not less than ten (10) years from commencement of operation or an agreement for purchase of the project by an electric utility or electric cooperative operating in the

Commonwealth of Virginia and upon the County's request, to the extent permitted by any non-disclosure agreements between the parties to such agreement.

44. The County may engage a professional construction project manager with demonstrated experience in the development of utility-scale solar facility during the construction/development of the project, with the requirement that reasonable costs of such engagement shall be reimbursed by the Applicant. The role of this project manager will be to serve as a primary point of contact between the County and the Applicant with respect to all aspects of the construction and development of the facility, to provide for Erosion and Sediment Control monitoring and inspection reports, and to assist the County and its staff and any associated third-party consultants in coordinating the compliant development of the facility consistent with all applicable local, state, and federal permits, ordinances, codes, regulations.
45. Inclusive of conditions applicable to the project in total, the battery energy storage facility shall be subject to the following specific requirements:
 - a. Configuration: the battery energy storage facility (BESF) shall be configured so that battery cells shall be placed in a Battery Energy Storage System ("BESS") with a Battery Management System ("BMS"). The BESS shall provide a secondary layer of physical containment to the batteries and be equipped with cooling, ventilation, and fire suppression systems.
 - b. Construction, Maintenance and Operation: Battery Energy Storage Facilities shall be constructed, maintained and operated in accordance with applicable codes and standards including but not limited to the then applicable fire, electrical and building codes adopted by the County; National Fire Protection Association (NFPA) 855, Standard for the Installation of Stationary Energy Storage Systems, 2020 Edition and subsequent additions; Underwriters Laboratories (UL) 9540A Ed. 4-2019, Standard for Test Method for Evaluating Thermal Runway Fire Propagation in Battery Energy Storage Systems and subsequent editions; and, unless otherwise required by such regulations and codes:
 - i. Each individual battery shall have 24/7 automated fire detection and extinguishing technology built in;
 - ii. The BMS shall monitor individual battery module voltages and temperatures, container temperature and humidity, off-gassing of combustible gas, fire, ground fault and DC surge, and door access;
 - iii. The BMS shall be capable of shutting down the system before thermal runaway takes place;
 - iv. Access to all batteries and electrical switchgear shall be from the exterior for normal operation and maintenance. Access to the container interior shall not be permitted while the system is in operation except for safety personnel and first responders; and
 - v. Signage shall include the following information: the type of technology associated with the battery energy storage systems; any special hazards

associated; the type of suppression system installed in the area of the battery energy storage system; 24-hour emergency contact information, including reach-back phone number. Additionally, disconnect and other emergency shutoff information shall be clearly displayed on a light reflective surface.

- c. In addition to the annual life and fire safety inspections required annually by the fire code and performed by County staff, the US Solar Facility operator shall conduct semi-annual on-site self-inspections of the battery units and submit a written report to the Zoning Administrator on their condition.

Schedule A
 Security of Performance – Summary of Securities

Condition Reference	Performance Being Secured	Duration
14	Pre-Construction Road Improvements; Road Repairs	Construction Phase
17	Grading	
19	Erosion & Sediment Control	
20	Stormwater Management/Control	Operations Phase/Full Lifecycle
11	Land cover & vegetative buffer maintenance	
23	Security fencing	
27	Decommissioning	

Posting and release of bonds shall be in accordance with the procedures set forth in the Sussex County Zoning Ordinance, Subdivision Ordinance, and Erosion & Sediment Control Ordinance.



"Good Things Are Happening in Sussex County!"
 Sussex County, Virginia
 Planning and Zoning Department

APPLICATION FOR CONDITIONAL USE PERMIT

This application should be used to petition for a permit for certain uses which, because of their unique characteristics or potential impacts on adjacent land uses, are not generally permitted in certain zoning districts as a matter of right, but which may, under the right set of circumstances and conditions be acceptable in certain specific locations. The following application requirements are consistent with the procedures set forth in Section 16-274, *Public hearing on Conditional Use Permit*, of the Sussex County Zoning Ordinance, as amended.

A. APPLICATION:

Conditional Use Permit (Are applicant proposed conditions attached?): Yes No

The proposed use or activity is listed as a conditional use in the A-1 zoning district as per Section 16-22(17) in Article III of the Sussex County Zoning Ordinance.

Proposed Use, Activity, or Type of Improvement: Utility-scale Solar Generation and Battery Energy Storage Facilities

Fair Market Value of Improvements? \$ \$1,356,000,000 (estimate)

B. PROJECT DESCRIPTION:

Project Name: Blackwater Solar LLC

Property Address (if any): _____

Election District: Local District 04 (0401) - Wakefield Precinct

Comprehensive Plan Designation: Agricultural / Forested / Open Space

The use permit will apply to 8,355 acres out of 8,355 total acres

Tax Parcel Identification # See Attached Schedule Number of acres to be effected: _____

Tax Parcel Identification # _____ Number of acres to be effected: _____

Tax Parcel Identification # _____ Number of acres to be effected: _____

Proposed Utilities (check all that apply):
 Public Water Private Well
 Public Sewer Private Septic

Are there any deed restrictions on the property? Yes No
 (If yes, please attach a copy of the deed restrictions.)



"Good Things Are Happening in Sussex County!"

Sussex County, Virginia
Planning and Zoning Department

C. APPLICATION INFORMATION:

Applicant(s) Name(s): Blackwater Solar LLC

Address: c/o Clenera, LLC, Attn: Admin. Dept., P.O. Box 2576

City, State, Zip Code: Boise, ID 83701

Phone No.: 517-292-9476, 208-639-3232 Email: ed.rumler@clenera.com Fax No.: 208-296-7425

Property Owner(s) Name(s): See Attached Schedule

Address: _____

City, State, Zip Code: _____

Phone No.: _____ Email: _____ Fax No.: _____

Applicants/Owners Affidavit (including compliance with all deed restrictions and covenants)

This application must be signed by the owner(s) of the subject property or must have attached written evidence of the owner's consent, which may be in the form of a binding contract of sale with the owner's signature or a letter signed by the owner(s), containing written authorization to act with full authority on the owner(s) behalf in filing this use permit application. Signing this application shall certify the owner's compliance with all deed restrictions and covenants, and shall constitute the granting of authority of the County to enter onto the property for the purpose of conducting site analyses and compliance with Federal, State and County regulations.

Blackwater Solar LLC
CRE-Blackwater Virginia LLC, its Sole Member
Clenera DevCo, LLC, its Sole Member
Clenera Holdings, LLC, its Sole Member

Applicant: Jason Ellsworth, Chief Executive Officer
Printed or Typed Name

Owner: See consent letters attached
Printed or Typed Name

Applicant: [Signature] Date: 5-2-2023
Signature

Owner: _____ Date: _____
Signature

County of Ada, State of Idaho

County of Sussex, Commonwealth of Virginia

Subscribed and sworn to before me Tammi
Sevy, A Notary Public in and for
the County of Ada, State of Idaho,
this 2 day of May, 2023

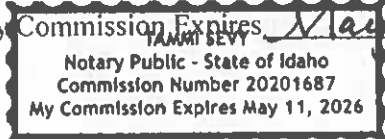
Subscribed and sworn to before me _____
_____, A Notary Public in and for
the County of Sussex, Commonwealth of Virginia,
this _____ day of _____, 20____

[Signature]
Notary Public

Notary Public

My Commission Expires May 11, 2026

My Commission Expires _____





"Good Things Are Happening in Sussex County!"
Sussex County, Virginia
Planning and Zoning Department

Owner: _____
Printed or Typed Name

Owner: _____
Printed or Typed Name

Owner: _____ Date: _____
Signature

Owner: _____ Date: _____
Signature

County of Sussex, Commonwealth of Virginia

County of Sussex, Commonwealth of Virginia

Subscribed and sworn to before me _____
_____, A Notary Public in and for
the County of Sussex, Commonwealth of Virginia,
this _____ day of _____, 20 _____

Subscribed and sworn to before me _____
_____, A Notary Public in and for
the County of Sussex, Commonwealth of Virginia,
this _____ day of _____, 20 _____

Notary Public

Notary Public

My Commission Expires _____

My Commission Expires _____



"Good Things Are Happening in Sussex County!"

Sussex County, Virginia

Planning and Zoning Department

NOTICE: THE ATTACHED CHECKLIST MUST BE COMPLETED, CERTIFIED, AND SUBMITTED OR THE APPLICATION WILL BE CONSIDERED INCOMPLETE.

Remit Application to: Sussex County Planning Department, 20135 Princeton Road, P. O. Box 1397, Sussex, Virginia 23884

FOR OFFICE USE ONLY:

Complete Application Received On: _____ Fees Paid: _____
Tax Query: [] Current [] Delinquent Distribution Date: _____
Posted/Date to Post: _____

AGENCIES REFERRALS:

- | | |
|---|----------------------------|
| _____ Department of Environmental Quality | _____ Building Inspections |
| _____ Finance | _____ Sheriff's Office |
| _____ Industrial Development Authority | _____ Town of Jarratt |
| _____ County Administration | _____ Town of Waverly |
| _____ Public Safety | _____ Town of Stony Creek |
| _____ Health Department | _____ Town of Wakefield |
| _____ VDOT | _____ Schools |
| _____ Commissioner of the Revenue | _____ County Attorney |
| _____ Sussex Service Authority | _____ Other _____ |

Verified By: _____ Date: _____



"Good Things Are Happening in Sussex County!"

Sussex County, Virginia
Planning and Zoning Department

**COUNTY OF SUSSEX
DISCLOSURE OF REAL ESTATE HOLDINGS**

Applicant Blackwater Solar LLC

Address c/o Clenera, LLC, Attn: Admin. Dept., P.O. Box 2576

Boise	Street ID	83701
City	State	Zip

REAL ESTATE HOLDINGS TO BE AFFECTED

Location or Address	Description
See Attached Document	

OTHER OWNERS OF AFFECTED REAL ESTATE

(Not Required for Corporation whose stock is traded on a national or local stock exchange or having more than 500 shareholders.)

Name of Individuals Corporation/Partnership Business Association	Address
See Attached Document	

Does any member of the Sussex County Planning Commission or governing body have any interest in such property, either individually, by ownership of stock in a corporation owning such land, partnership, as the beneficiary of a trust, or the settlor of a revocable trust, or whether a member of the immediate household of any member of the Planning Commission or governing body has any such interest? Yes No

If yes, names of members:

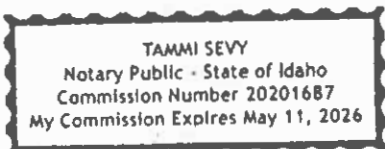
I do solemnly swear that the foregoing statement(s) and attachment(s), if any, are complete, correct and true.

Applicant: Jason Ellsworth, Chief Executive Officer of Applicant: [Signature] Date: 5-2-2023
Clenera Holdings LLC, indirect manager of Blackwater Solar LLC Printed or Typed Name Signature

State of Idaho
County of Ada

Subscribed and sworn to before me Tammi Sevy
A Notary Public in and for the County of Ada, State of
Idaho, this 2 day of May, 2023

[Signature]
Notary Public



My Commission Expires May 11, 2026

BLACKWATER SOLAR LLC - SUSSEX COUNTY PROJECT PARCELS

Parcel Identifier Sheet #	Parcel Number	Zoning	Name	Address	City, State	Zipcode	Calculated Acreage	Effected Acreage
3	132-A-2	A-1	ASSAMOOSICK PROPERTIES, LLC	4358 TASON DRIVE	SUFFOLK, VA	23434	248.9	143.0
16	132-A-3	A-1	ASSAMOOSICK PROPERTIES, LLC	4358 TASON DRIVE	SUFFOLK, VA	23434	26.9	0.0
10	78-A-17A	A-1	CARROLL BENJAMIN & DIANE & ROSSIE	13322 COURTLAND ROAD	WAKEFIELD, VA	23888	12.9	1.8
11	78-A-18	A-1	CARROLL EDWIN BENJAMIN LIFE ESTATE	13322 COURTLAND ROAD	WAKEFIELD, VA	23888	127.0	45.9
13	94-A-5	A-1	COXE TIMBERLANDS-CABOOSE VA LLC	2901 KINGS FORK ROAD	SUFFOLK, VA	23434	1,009.1	578.1
5	60-A-15	PUD	DRUMRIGHT PROPERTY LLC	9160 GRANITE KNOLL COURT	LAS VEGAS, NV	89129	289.5	103.8
12	78-A-19	PUD	DRUMRIGHT PROPERTY LLC	9160 GRANITE KNOLL COURT	LAS VEGAS, NV	89129	983.0	501.3
7	78-A-11	A-1	HOLT LIVESAY	109 GRAY FOX LANE	FRANKLIN, VA	23851	135.0	77.7
8	78-A-12	A-1	JOSEPH A STEPHENSON	9475 KELLOS MILL RD	WAKEFIELD, VA	23888	80.2	65.7
14	95-A-1	A-1	RUSSELL EDWARD HOLLAND	2445 MANAKINTOWN FERRY ROAD	MIDLOTHIAN, VA	23113	195.3	103.7
1	115-A-12	A-1	WESTERVELT LAND & TIMBER LLC	1400 JACK WARNER PKWY	TUSCALOOSA, AL	35404	43.8	17.7
2	115-A-19	A-1	WESTERVELT LAND & TIMBER LLC	1400 JACK WARNER PKWY	TUSCALOOSA, AL	35404	30.0	12.0
4	132-A-6	A-1	WESTERVELT LAND & TIMBER LLC	1400 JACK WARNER PKWY	TUSCALOOSA, AL	35404	97.5	45.9
6	77-A-8	A-1	WESTERVELT LAND & TIMBER LLC	1400 JACK WARNER PKWY	TUSCALOOSA, AL	35404	141.9	116.0
9	78-A-13	A-1	WESTERVELT LAND & TIMBER LLC	1400 JACK WARNER PKWY	TUSCALOOSA, AL	35404	50.5	25.0
15	96-A-12	A-1	WESTERVELT LAND & TIMBER LLC	1400 JACK WARNER PKWY	TUSCALOOSA, AL	35404	310.7	177.7
17	114-A-1	A-1	WESTERVELT LAND & TIMBER LLC	1400 JACK WARNER PKWY	TUSCALOOSA, AL	35404	4,474.2	2708.3
18	13-5	A-1	WESTERVELT LAND & TIMBER LLC	1400 JACK WARNER PKWY	TUSCALOOSA, AL	35404	98.4	59.2
TOTAL							8,354.8	4,782.8

Beverly Walkup

From: Beverly Walkup
Sent: Friday, February 2, 2024 5:16 PM
To: Ed Rumler
Cc: Steve Romine; Richard Douglas; Michael Poarch; Michael Zehner; Linds Edwards
Subject: FW: Blackwater Solar Comments
Attachments: 23-1215 Blackwater Solar comments.pdf; 89526, SUSS, Blackwater Solar CUP.pdf; Re Blackwater Solar CUP Application Review- 2nd Submittal.msg; DWR-Sussex_BlackwaterSolar_June2023.pdf; DWR - Blackwater Solar updated CUP application.eml; Town of Wakefield.Solar Resolution-Signed.pdf; Blackwater Solar Resubmission C&C Review 1_4_24 FINAL.pdf; Blackwater Solar Comments.Fire and Rescue.docx

Dear Ed:

Review of the Blackwater Solar application has been completed. Attached you will find comments from the County's outside review consultant, The Berkley Group, as well as from other responding review agencies.

Additionally, Planning comments are listed below.

County staff is discussing the public hearing process, and is looking to schedule the application(s) for a joint public hearing with the Board of Supervisors and Planning Commission in late March. I will keep you updated.

Please let me know if you desire to meet to discuss any comments.

Sincerely,
Beverly

Planning Comments :

1. As stated in the CUP application, the total parcel area is 8,355 acres with approximately 4,800 acres of disturbance. The County's Comprehensive Plan provides a general recommendation that projects not exceed 5,000 acres.
2. Wetlands shall be permanently protected by a 150 foot buffer per Article VII, section 34-910(f) of the County Zoning Ordinance. No such buffers were identified.
3. The project is roughly ½ mile from the Town of Wakefield boundary. The Comprehensive Plan generally recommends that projects be further than three (3) miles from any village or town boundary.
4. The location of this project may render impacts on environmentally sensitive areas such as wetlands, Assamoosick swamp, Deep Branch, German Swamp, Seacorrie Swamp, Mill Run, Seacock Swamp, and DrumWright conservation site noted in comments for DCR and DWR. Along with the environmentally sensitive areas, most of those areas are designated as a Special Flood Hazard Area (SFHA) Zone A. The amount of potential discharge from the proposal should be considered as the potential for downstream flooding on other properties or an increase in the Base Flood Elevation due to the increase in the volume of runoff from different points of the site where discharge would occur from the basins. Therefore, evaluation of hydrologic and hydrogeologic function is recommended consistent with the recommendation of DWR.
5. There is concern for the number of access points, management of site work and construction traffic due to the size of this project. The land disturbance activity for this project should be phased as noted by the applicant. However, working in all types of weather conditions is of concern to the County in terms of

construction traffic tracking dirt on the roads into the roadway ditches and waterways, and the number of conflict points created by numerous access points.

6. The traffic and route evaluation study shows access provided via unpaved and/or substandard roads with no recommendations for improvement. Staff recommends that no access be provided from unpaved and/or substandard roads without consideration for improvement due to the heavy traffic conditions witnessed during ongoing construction activities on other solar projects currently under construction within the County.
7. Staff concurs with DHR's recommendation for a phase I archeological survey to be conducted within the project area.

Other agencies/departments comments:

- VDOT- see attached
- DCR- see attached
- DHR- see attached
- DWR- see attached
- Town of Wakefield- see attached
- DEQ- No comment received at this time.
- Zach Dowling (DOF)- No comment
- Sheriff Giles- No comment
- Nick Sheffield (Chief of Emergency Services)- see attached
- Southampton County- No comment at this time.



MEMORANDUM

Community Development Division

To: Beverly Walkup, Director of Planning
Michael Poarch, Planner II
Sussex County, VA

From: Michael Zehner, AICP, CFM, ENV SP, Director of Community
Development and Planning
Linds Edwards, ENV SP, Planner II

Date: January 4, 2024

Subject: Zoning Completeness and Compliance Review – Blackwater Solar
Energy, 600 MW and 400 MW BESS

OVERVIEW AND SUMMARY

As requested, on behalf of Sussex County we are providing a review to determine whether the application submitted by Blackwater Solar, LLC ("the Applicant") for a 600 MW solar facility and a 400 MW Battery Energy Storage facility located on 18 parcels south of the Town of Wakefield (cover letter dated May 5, 2023; "the Application") is complete, as well as compliant, with respect to applicable requirements of the Sussex County Zoning Ordinance ("SCZO"). The original Application was previously reviewed for completeness and compliance and determined to be incomplete and noncompliant as outlined in a memorandum dated June 16, 2023. Revised Application materials were submitted on November 27, 2023.

The Application as revised has been reviewed for completeness and compliance with respect to the sections and subsections of the SCZO identified below. **Based upon our review, and detailed below, it is our opinion that the Application is both complete and compliant and may proceed to further review.**

Please note, this review has only been performed to determine whether the Application includes all required materials and information, as well as materials and information necessary to conduct a complete review pursuant to § 15.2-2232, *Legal status of plan*, of the Code of Virginia and the SCZO, and to determine that the project meets applicable and objective requirements and standards of the SCZO. This review provides no opinion as to whether the project is in accord with the County's Comprehensive Plan and/or satisfies requisite findings associated with the review of a conditional use permit; those reviews would be completed should the Application proceed to further review.

ZONING COMPLETENESS REVIEW

Regulations applicable to the Application, as set forth in the SCZO and relevant to the completeness and compliance of the Application, are as follows, with the

Berkley Group's interpretation of application completeness and/or compliance noted in **bold underlined type**:

Sec. 16-1, Definitions

Battery storage facility means a type of energy storage power station that uses a group of batteries to store electrical energy as a source of power on electrical grids.

Battery energy storage facilities (battery facilities) means one or more battery cells for storing electrical energy stored in a Battery Energy Storage System ("BESS") with a Battery Management System ("BMS"). Facilities are generally used to supplement grid storage capacity. Battery facilities may be permitted as:

- an accessory use to utility-scale solar facilities, other energy generation facilities, or substations; or
- a primary use on a parcel contiguous to utility-scale solar facilities, other energy generation facilities, and substations.

Solar facility, utility-scale means a ground-mounted facility that generates electricity from sunlight on a facility area of not less than 65 acres based upon the 100-acre minimum area requirement contained in Section 16-406(b)(1). In no case shall any utility-scale facility have a maximum coverage area more than 65% in accordance with Section 16-406(b)(2). This size is approximately equivalent to a rated capacity of about one megawatt (MW) alternating current or greater (excluding Solar facility, multi-family shared). Facilities are generally used to provide electricity to a utility provider. These facilities typically include inverters, a substation, a switchyard, and a generator lead line (gen-tie line) to interconnect to a grid transmission line.

Compliant; based upon the generation capacity of the proposed facility (400 MW) and other aspects of the proposal, the facility is a utility-scale solar facility, as defined. Additionally, the battery energy storage facility is an accessory use to the solar facility, as defined.

Sec. 16-403, Zoning districts

- c. Solar facilities shall be permitted in zoning districts as follows:

Solar Facility	General Agricultural, A-1	Limited Industrial, I-1	General Industrial, I-2	Residential Multi-Family, R-1
Multi-family shared	CUP	CUP	CUP	CUP
Medium-scale	CUP	By-right	By-right	-
Utility-scale	CUP	CUP	CUP	-

Complete and Compliant; parcels comprising the facility site are zoned A-1, Agricultural and PUD, Planned Unit Development. In conjunction with the Conditional Use Permit Application, the Applicant will be seeking a rezoning of those parcels zoned PUD to A-1.

- d. Battery facilities shall be subject to a Conditional Use Permit and permitted as follows:
1. An accessory use to utility-scale solar facilities, other energy generation facilities, or substations; or
 2. A primary use on a parcel contiguous to utility-scale solar facilities, other energy generation facilities, and substations.

Battery Facility	General Agricultural, A-1	Limited Industrial, I-1	General Industrial, I-2	Residential Multi-Family, R-1
Primary use	CUP	CUP	CUP	-
Accessory use	CUP	CUP	CUP	CUP

Compliant; the BESS facility site is zoned A-1 Agricultural and the Applicant is seeking approval as an accessory use to the 400 MW solar facility.

- e. Solar facilities should locate on brownfields, County-owned capped landfills, or near existing industrial uses, where feasible.

Not applicable at this time; the facility site is zoned A-1 Agricultural and is not located on or near brownfields, landfills, or existing industrial uses; however, these siting/location standards are subject to feasibility, and the project will be evaluated further through 2232 Review and consideration of the CUP.

Sec. 16-404, Conditional Use Permit process

- a. Pre-application meeting. A pre-application meeting shall be held with the zoning administrator to discuss the location, scale, and nature of the proposed use, what will be expected during that process, and the potential for a siting agreement.

Complete; according to County staff, a pre-application meeting between the Applicant or a representative and the Zoning Administrator was held on April 18, 2023.

- b. Neighborhood meeting. A public meeting shall be held prior to the public hearing with the Planning Commission to give the community an opportunity to hear from the applicant and ask questions regarding the proposed project.

Complete; according to County staff, a neighborhood meeting between the Applicant or a representative and the Zoning Administrator was held meeting all requirements.

- c. Submittal of the permit application and fees.

1. There is a combined application for the 2232 review and CUP permit.
2. There are separate fees for the 2232 review and CUP permit.

Complete; according to County staff, the permit application and fees have been submitted to the Zoning Administrator.

Sec. 16-405, Conditional Use Permit application

- a. Application packet including:

1. Completed County application form and checklist.
2. Documents demonstrating the ownership of the subject parcel(s).
3. Proof that the applicant has authorization to act upon the owner's behalf.
4. Identification of the intended utility company who will interconnect to the facility.
5. List of all adjacent property owners, their tax map numbers, and addresses.
6. A description of the current use and physical characteristics of the subject parcels.
7. A description of the existing uses of nearby properties.

8. A narrative identifying the applicant, owner, or operator, and describing the proposed solar facility project, including an overview of the project and its location, approximate rated capacity of the solar facility project, the approximate number of panels, representative types, expected footprint of solar equipment to be constructed, and type and location of interconnection to electrical grid.
9. Aerial imagery which shows the proposed location of the solar facility, fenced area, driveways, and interconnection to electrical grid with the closest distance to all adjacent property lines and dwellings along with main points of ingress/egress.
10. Payment of the application fee and any additional review costs, advertising, or other required staff time.

Complete; the Application includes all the required Application information.

- b. Concept plan. A concept plan prepared by an engineer with a professional engineering license in the Commonwealth of Virginia, that shall include the following:
 1. Project title information including tax parcel number, zoning, owner names, address, and phone numbers.
 2. Neighboring property information including tax parcel number, zoning, and owner names.
 3. Existing wetlands, waterways, and floodplains.
 4. Locations and types of soils on site.
 5. Areas of steep slopes.
 6. Existing and proposed buildings and structures including preliminary locations of the proposed solar panels and related equipment.
 7. Existing and proposed points of ingress/egress including access roads, drives, turnout locations, and parking.
 8. Location of substations, electrical cabling from the solar facility systems to the substations, ancillary equipment, buildings, and structures including those within any applicable setback.
 9. Fencing or other methods of ensuring public safety.
 10. Locations of topsoil to be removed and preserved.
 11. Locations of stormwater drainage and erosion and sediment control features.
 12. Setbacks.
 13. The location and nature of proposed buffers and screening elements, including vegetative and constructed buffers.

Complete; the Concept Plan contains all required information.

- c. An estimated construction schedule.

Complete; the Application includes a construction schedule incorporating all required information and content.

- d. Environmental inventory and impact statement regarding any site and viewshed impacts, including direct and indirect impacts to national and state forests, national or state parks, wildlife management areas, conservation easements, recreational areas, or any known historic or cultural resources within three (3) miles of the proposed project using information provided by the Virginia Department of Environmental Quality (DEQ), the Virginia Department of Conservation (DCR), Virginia Department of Wildlife Resources (DWR), Virginia Department of Historic Resources (DHR), and/or a report prepared by a qualified third party, such as ConserveVirginia or Virginia Cultural Resource Information System.

Complete; the Application includes an environmental inventory and impact statement incorporating all required information and content.

- e. A visual impact analysis demonstrating project siting and proposed mitigation, if necessary, so that the solar facility minimizes impact on the visual character of the County.
1. The applicant shall provide accurate, to scale, photographic simulations showing the relationship of the solar facility and its associated amenities and development to its surroundings. The photographic simulations shall show such views of solar structures from locations such as property lines and roadways, as deemed necessary by the County in order to assess the visual impact of the solar facility.
 2. The total number of simulations and the perspectives from which they are prepared shall be established by the zoning administrator after the pre-application meeting.

Complete; the Application includes a visual impact analysis and photographic simulations that incorporate all required information and content.

- f. Solar facility inventory. An inventory of all solar facilities – existing or proposed – within a four (4) mile radius.

Complete; the Application includes a map of all solar facilities within a 4-mile radius.

- g. Draft traffic study. The study shall include modelling the construction and decommissioning processes. County staff will review the study in cooperation with VDOT.

Complete; the Application includes a Draft traffic study incorporating all required information and coordination with VDOT.

- h. Draft landscaping plan. The plan shall indicate:
1. All ground cover, screening and buffering materials, landscaping, and elevations.
 - a. Ground cover shall be native vegetation where compatible with site conditions.
 - b. Screening vegetation shall include pollinator plants where compatible with site conditions.
 - c. Only EPA approved herbicides shall be used for vegetative and weed control at the solar energy facility by a licensed applicator. No herbicides shall be used within 150 feet of the location of an approved ground water well. The Applicant shall submit an herbicide land application plan prior to approval of the certificate of occupancy (or equivalent). The plan shall specify the type of herbicides to be used, the frequency of land application, the identification of approved groundwater wells, wetlands, streams, and the distances from land application areas to features such as wells, wetlands, streams, and other bodies of water. The operator shall notify the County prior to application of pesticides and fertilizers. The County reserves the right to request soil and water testing.
 2. Locations of wildlife corridors.
 3. Maintenance requirements.

Complete; the Application includes a Draft landscaping and vegetation maintenance plan incorporating all required information and design elements.

- i. Draft decommissioning and reclamation plan. A detailed decommissioning and reclamation plan, certified by an engineer, which shall include the following:

1. The anticipated life of the project. The applicant shall provide the basis for determining the anticipated life of the project.
2. The estimated decommissioning and reclamation cost in current dollars. The applicant shall provide a cost estimate for the decommissioning and reclamation of the facility prepared by a professional engineer or contractor who has expertise in the removal of solar facilities. The decommissioning and reclamation cost estimate shall explicitly detail the cost without any reduction for salvage value.
3. The method of ensuring that funds will be available for decommissioning and reclamation. A proposed method of providing appropriate escrow, surety, or security for the cost of the decommissioning and reclamation plan. The surety shall be updated when the decommissioning and reclamation cost estimate is updated. 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 unless otherwise provided for in subsection d below.
 - a. 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.
 - b. 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 and reclamation plan. The County may approve the partial release of escrow funds as portions of the approved decommissioning plan are performed.
 - c. The amount of funds required to be deposited in the escrow account shall be the full amount of the estimated decommissioning and reclamation cost.
 - d. The County may approve alternative methods to secure the availability of funds to pay for the decommissioning and reclamation of a solar facility, such as a performance bond, letter of credit, or other security approved by the County.
4. The method that the estimated cost will be kept current. The decommissioning and reclamation cost estimate shall include a mechanism for calculating increased removal costs due to inflation. This cost estimate shall be recalculated every five (5) years and the surety shall be updated accordingly. If the recalculated estimated cost exceeds the original estimated cost 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 is less than ninety percent (90%) of the original estimated cost, then the County may approve reducing the amount of the escrow account to the recalculated estimate of cost.

Complete; the Application includes a decommissioning plan incorporating all required financial information and was prepared by a licensed engineer.

5. The manner in which the site will be decommissioned and reclaimed. This will include:
 - a. Notice to the Zoning Administrator by certified mail and in person of the proposed date of discontinued operations and plans for removal.
 - b. A traffic study submitted with application modelling the decommissioning processes. County staff will review the study in cooperation with VDOT.
 - c. An estimated deconstruction schedule.
 - d. Removal of all solar electric systems, buildings, cabling, electrical components, security barriers, roads, foundations, pilings, and any other associated facilities, so that any agricultural ground upon which the facility and/or system was located is again tillable and suitable for agricultural or forestall uses.
 - e. The site shall be graded and re-seeded or replanted within 12 months of removal of solar facilities to restore it to as natural a pre-development condition as possible. Re-grading and re-seeding or replanting shall be initiated within a six-month period of removal of equipment. Any exception to site restoration, such as leaving access roads in place or re-seeded or replanted must be requested by the landowner in writing, and this request must be approved by the Board of Supervisors.
 - f. Hazardous material from the property shall be disposed of in accordance with federal and state law.

Complete; the Application includes a decommissioning and reclamation plan incorporating all required information and design elements.

- j. Additional information may be required as determined by the Zoning Administrator, such as a scaled elevation view of the property and other supporting drawings, photographs of the proposed site, photo or other realistic simulations or modeling of the proposed project from potentially sensitive locations as deemed necessary by the Zoning Administrator to assess the visual impact of the project, landscaping plan, coverage map,

and additional information that may be necessary for a technical review of the proposal.

Not applicable at this time.

Sec. 16-406, Minimum development and performance standards

- a. A utility-scale solar facility shall be constructed, operated, and maintained in substantial compliance with the approved concept plan with allowances for changes required by the Virginia Department of Environmental Quality (DEQ) Permit by Rule (PBR) or State Corporation Commission (SCC) permit process.

Compliance anticipated; the Applicant has specifically mentioned their intentions to comply with DEQ, and other agency, regulations.

- b. Location standards for utility-scale solar facilities. The location standards stated below for utility-scale solar facilities are intended to mitigate the adverse effects of such uses on adjoining property owners, the area, and the County.
 1. The minimum area of a utility-scale solar facility shall be 100 or more.

Compliant; the facility is larger than 100 acres.

2. The equipment, improvements, structures, and percent of acreage coverage of a utility-scale solar facility shall be shown on the approved concept plan and site plan. The percent of acreage coverage shall not exceed 65%.

Compliant; the Application notes that the area of disturbance is approximately 5,000 acres, or 59.8% of the total site area.

- c. Height.
 1. The maximum height of the lowest edge of photovoltaic panels shall be 10 feet as measured from the finished grade. The maximum height of the highest edge of photovoltaic panels shall not exceed 15 feet as measured from the finished grade.
 2. The maximum height of other facility structures shall not exceed 15 feet. This limit shall not apply to utility poles or the interconnection to the overhead electric utility grid.

3. The Board of Supervisors may approve a greater height based upon the demonstration of a significant need where the impacts of increased height are mitigated.

Compliant; the revised Application notes that the maximum height of the lowest edge of the solar modules will be ten feet (10') above the finished grade and that the maximum height of the solar module in the highest position will be fifteen feet (15') above the finished grade.

- d. Setbacks. Solar facilities shall meet all setback requirements for primary structures for the zoning district in which the facility is located and the requirements set forth below (the more restrictive requirements shall apply).
 1. The minimum setback of structures and uses associated with the facility, including fencing, PV panels, parking areas, and outdoor storage, but not including landscaping and berming, shall be:
 - a. 150 feet from adjacent property lines.
 - b. 150 feet from all public rights-of-way.
 - c. 300 feet from a dwelling.
 2. The Planning Commission or Board of Supervisors may require increased setbacks up to 400 feet in situations where the height of structures or the topography affects the visual impact of the facility.
 3. These setback requirements shall not apply to internal property lines of those parcels on which a solar facility is located.
 4. Access, erosion and stormwater structures, and interconnection to the electrical grid may be made through setback areas provided that such are generally perpendicular to the property line.
 5. Vehicular access to the site shall be a minimum of 50 feet from the nearest dwelling located on adjacent property.

Compliant; the minimum setback is accurately depicted as a setback on the submitted Concept Plan. Additionally, all vehicular access points are at least 50' from the nearest dwellings located on adjacent properties.

- e. Buffer. The buffer shall be located within the setbacks required under this Section and shall run around the entire perimeter of the property. The buffer shall be maintained for the life of the facility.

Compliance anticipated; the Application includes a buffer and vegetation maintenance plan.

f. Screening. The facilities, including security fencing that is not ornamental, shall be screened from the ground-level view of adjacent properties or a public street in the buffer zone. Screening may also be required in other locations to screen specific uses or structures. A recommendation that the screening and/or buffer creation requirements be waived or altered may be made by the Planning Commission when the applicant proposes to use existing wetlands or woodlands to satisfy the screening requirement. The wetlands or woodlands shall be permanently protected as a designated buffer and the overall buffer shall measure at least 150 feet. Screening methods may include:

1. Existing Screening: Existing vegetation, topography, buildings, open space, or other elements located on the site may be considered as part of the required screening. Existing trees and vegetation may be retained within the buffer area except where dead, diseased, or as necessary for development or to promote healthy growth.
2. Vegetative Screening: In the event existing vegetation or landforms providing the screening are inadequate or disturbed, new plantings shall be provided in a landscaped strip at least 50 feet wide. Landscaping intended for screening shall consist of a combination of non-invasive species, pollinator species, and native plants, shrubs, trees, grasses, forbs, and wildflowers. Trees intended for screening shall consist of a combination of evergreen and deciduous trees that are 5-6 ft. in height at time of planting. A triple row of trees shall be placed on average at 15 ft. on center. A list of appropriate plant materials shall be available at the Planning Office. Species listed on DCR's Invasive Plant Species list shall not be used.

Compliance anticipated; the proposed Project includes both vegetative screening and utilization of the existing vegetation.

3. Berming: Berms shall generally be constructed with a 3:1 side slope to rise ratio, 4-6 ft. above the adjacent grade, with a 3 ft. wide top with appropriate pollinator-friendly native plants, shrubs, trees, forbs, and wildflowers. The outside edges of the berm shall be sculpted such that there are vertical and horizontal undulations to give variations in appearance. When completed, the berm should not have a uniform appearance like a dike.
4. Opaque Architectural Fencing. Fencing intended for screening shall be at least 75 percent visually solid as viewed on any line perpendicular to the

fence from adjacent property or a public street. Such fencing may be used in combination with other screening methods but shall not be the primary method. A typical example is the use of wood privacy fencing and landscaping to screen structures such as substations. Depending on the location, ornamental features may be required on the fence. Fencing material shall not include plastic slats.

- e. Security Fence. The facilities shall be enclosed by security fencing not less than six (6) feet in height and topped with barbed wire, as appropriate. A performance bond reflecting the costs of anticipated fence maintenance shall be posted and maintained. Failure to maintain the security fencing shall result in revocation of the CUP and the facility's decommissioning.

Compliance anticipated; the proposed Project includes security fencing not less than 6 feet in height.

- f. Ground cover on the site shall be native vegetation and maintained in accordance with the landscaping plan in accordance with established performance measures. A performance bond reflecting the costs of anticipated maintenance shall be posted and maintained. Failure to maintain the ground cover shall result in revocation of the CUP and the facility's decommissioning. The operator shall notify the County prior to application of pesticides and fertilizers. The County reserves the right to request soil and water testing.

Compliant; the Application addresses the ground cover regulation appropriately. Compliance with the performance bond requirement is anticipated and referenced by the Applicant.

- g. The Applicant shall identify access corridor(s) for wildlife to navigate through and across the Solar Facility. The proposed wildlife corridor(s) 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.

Compliance; the Application addresses the wildlife corridor regulation appropriately.

- h. The design of support buildings and related structures shall use materials, colors, textures, screening, and landscaping that will blend the facilities to the natural setting and surrounding structures.

Compliance anticipated; the revised Application addresses the design of support buildings regulation appropriately.

- i. The owner or operator shall maintain the solar facility in good condition. Such maintenance shall include, but not be limited to, painting, structural integrity of the equipment and structures, as applicable, and maintenance of the buffer areas and landscaping. Site access shall be maintained to a level acceptable to the County. The project owner shall be responsible for the cost of maintaining the solar facility and access roads, and the cost of repairing damage to private roads occurring as a result of construction and operation.

Compliance anticipated; the Owner shall maintain the solar facility in good condition.

- j. Inspections.
 1. The Applicant will allow designated County representatives or employees access to the facility for inspection purposes with 24-hour notice.
 2. The Applicant shall reimburse the County its costs in obtaining an independent third-party to conduct inspections required by local and state laws and regulations.

Compliance anticipated; the Applicant will allow for inspections.

- k. A utility-scale solar facility shall be designed and maintained in compliance with standards contained in applicable local, state, and federal building codes and regulations that were in force at the time of the permit approval.

Compliance anticipated with respect to state and federal codes and regulations; noncompliant as noted herein with respect to local regulations.

- l. The applicant shall provide proof of adequate liability insurance for a solar facility prior to beginning construction and before the issuance of a zoning or building permit to the zoning administrator.

Compliance anticipated; liability insurance is not specifically mentioned in the Application, proof would be required prior to beginning construction.

- m. Lighting fixtures as approved by the County shall be the minimum necessary for safety and/or security purposes to protect the night sky by facing downward and to minimize off-site glare. No facility shall produce glare that would constitute a nuisance to the public. Any exceptions shall be enumerated on the Concept Plan and approved by the zoning administrator.

Compliance anticipated; the Applicant notes lighting will be dark-sky compliant and will face downward.

- n. No signage of any type may be placed on the facility other than notices, warnings, and identification information required by law.

Compliance anticipated; no signage is mentioned in the Application beyond emergency signage.

- o. At all times, the solar facility shall comply with the County's noise ordinance.

Compliance anticipated; the solar facility shall comply with the County's noise ordinance.

- p. Coordination of local emergency services. Applicants for new solar facilities shall coordinate with the County's emergency services staff to provide materials, education and/or training to the departments serving the property with emergency services in how to safely respond to on-site emergencies.

Compliant; the revised Application includes plans for coordination and education of local emergency services staff.

- q. Decommissioning

1. Solar facilities which have reached the end of their useful life or have not been in active and continuous service for a period of six (6) months shall be removed at the owner's or operator's expense, except if the project is being repowered or a force majeure event has or is occurring requiring longer repairs; however, the County may require evidentiary support that a longer repair period is necessary.
2. The owner or operator shall notify the zoning administrator by certified mail and in person of the proposed date of discontinued operations and plans for removal.

3. Decommissioning shall include removal of all solar electric systems, buildings, cabling, electrical components, security barriers, roads, foundations, pilings, and any other associated facilities, so that any agricultural ground upon which the facility and/or system was located is again tillable and suitable for agricultural or forestall uses. The site shall be graded and re-seeded to restore it to as natural a pre-development condition as possible or replanted with pine seedlings to stimulate pre-timber pre-development conditions as indicated on the Concept Plan. Any exception to site restoration, such as leaving access roads in place or seeding instead of planting seedlings must be requested by the landowner in writing, and this request must be approved by the Board of Supervisors.
4. The site shall be re-graded and re-seeded or replanted within 12 months of removal of solar facilities. Re-grading and re-seeding or replanting shall be initiated within a six-month period of removal of equipment.
5. Decommissioning and reclamation shall be performed in compliance with the approved decommissioning and reclamation plan. The Board of Supervisors may approve any appropriate amendments to or modifications of the decommissioning plan.
6. Hazardous material from the property shall be disposed of in accordance with federal and state law.
7. 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.

Complete; the Application includes a decommissioning plan incorporating all required information and content.

- r. Any other condition added by the Planning Commission or Board of Supervisors as part of a CUP approval.

Not applicable; conditions will be proposed as a part of the CUP process.

Sec. 16-407 Special provisions for battery facilities.

In addition to the above general provisions, application requirements, and development and performance standards, the following additional requirements shall be met for the approval of a Battery Energy Storage Facility:

- a. Battery Energy Storage Facilities shall be constructed, maintained, and operated in accordance with national industry standards and regulations including the most current adopted edition of the National Electrical Code, International Fire Code of the International Code Council, and the National Fire Protection Association Fire Code. The batteries will be NFPA (National Fire Protection Agency) compliant. In the event of a conflict between the national industry standards and these Conditions, the national industry standards shall control so that as technology advances, updated technology may be used.

Compliant; the BESS facility will comply with NFPA Code.

- b. Battery cells shall be placed in a Battery Energy Storage System ("BESS") with a Battery Management System ("BMS"). The BESS shall provide a secondary layer of physical containment to the batteries and be equipped with cooling, ventilation, and fire suppression systems. Each individual battery shall have 24/7 automated fire detection and extinguishing technology built in. The BMS shall monitor individual battery module voltages and temperatures, container temperature and humidity, off-gassing of combustible gas, fire, ground fault and DC surge, and door access and be able to shut down the system before Thermal Runaway takes place.

Compliant; the revised Concept Plan and supporting documents indicate equipment, monitoring, and safety specifications for the BESS facility.

- c. The Battery Energy Storage System will be placed on an appropriate foundation and screened with vegetation outside of environmentally sensitive areas.

Compliance anticipated; the revised Concept Plan and supporting documents indicate BESS facility foundation and screening specific to environmentally sensitive areas.

- d. Access to all batteries and electrical switchgear shall be from the exterior for normal operation and maintenance. Access to the container interior shall not be permitted while the system is in operation except for safety personnel and first responders.

Compliance anticipated; the revised Concept Plan and supporting documents reference permitted access to the BESS facility.

- e. Qualifications and experience from selected developers and integrators shall be provided including disclosure of fires or other hazards at facilities.

Compliance anticipated; the revised Concept Plan and supporting documents include qualifications and experience from developers.

- f. Safety testing and failure modes analysis data from selected developers and manufacturers shall be provided.

Compliance anticipated; the Concept Plan and supporting documents include safety testing and failure analysis from developers.

- g. The latest applicable product certifications shall be provided.

Compliance anticipated; the Concept Plan and supporting documents include product certifications.

- h. The Solar Facility operator or owner shall be responsible for any environmental remediation required by the county or the state and the costs of such remediation. All remediation shall be completed in a timely manner.

Compliance anticipated; the Concept Plan and supporting documents include plans for environmental remediation related to the BESS facility.

- i. Battery storage shall be developed in collaboration with technical experts and first responders to utilize technology-appropriate best practices for safe energy storage systems including, but not limited to, the following:

1. Adequate access/egress for the first responders;
2. Adequate facility signage (on battery chemistry and person to contact);
3. Accessible Safety Data Sheets;
4. System-specific emergency response plans;
5. Training for first responders on the type of system, potential hazards and risks, and system-specific emergency response plans;
6. Adequate water sources and fire suppression appliances for the fire fighters if required in the emergency response plans;
7. Signage on Hazardous Materials present in the vicinity;
8. Emergency lighting;
9. Separate battery modules to make it easier to isolate a failed battery from the rest;

10. Sufficient disconnect and shutdown capability including a master kill switch to disable and discharge batteries;
11. System-appropriate sensors and alarms;
12. Air ventilation and fire suppression systems;
13. Drainage for water runoff; and
14. Other practices as recommended by experts or local first responders.

Compliant; the revised Concept Plan and supporting documents include development plans and construction details specific for the BESS facility.

- j. The Solar Facility operator or owner shall conduct regular on-site inspections of the battery units and submit a written report to the Zoning Administrator on their condition, at least once every six (6) months. The Solar Facility operator or owner shall conduct monthly inspections electronically of the battery units and submit a written report to the Zoning Administrator.

Compliance anticipated; the Concept Plan and supporting documents address regular site inspections.

Sec. 16-408 Special provisions for substations.

In addition to the above general provisions, application requirements, and development and performance standards, the following additional requirements shall be met for the approval of a substation:

- a. Siting. Substations located within the Solar Facility shall be sited in accordance with these regulations.
- b. Term and Special Permits. Substations included as part of the Solar Facility shall have the same term as the Solar Facility. However, Substations may have a life longer than that of the larger Solar Facility, and, alternatively, may individually and not as part of a Solar Facility receive a Conditional Use Permit in accordance with these regulations.

Compliance anticipated; substations are included in the project Plans and shall comply with Solar Facility siting regulations.



COMMONWEALTH of VIRGINIA

DEPARTMENT OF TRANSPORTATION

23116 Meherrin Road
COURTLAND, VIRGINIA 23837

December 15, 2023

Michael Poarch
Community Development
Sussex County
P. O. Box 1397
Sussex, VA 23884

**RE: Blackwater Solar
Tax Map #'s Assorted
Assorted Routes (Routes 628, 621, 622, 606, etc.)
Sussex County**

The Residency has completed its review of the subject conditional use application and comment response dated November 27, 2023, and received by the VDOT Land Development Office on December 1, 2023. There was no response to our previous comments, so we again offer the following comments:

- 1) All entrances onto the public right of way must be designed in accordance with Appendix F of the VDOT Road Design Manual and will be reviewed during the site plan process.
- 2) Any utility installations within the public right of way will need to be owned and maintained by a public utility company registered with Virginia 811.
- 3) The application does not provide useable exhibits clearly showing proposed locations and types of overhead/underground electrical crossings, any new transmission lines, etc., that will cross or otherwise occupy the public right of way.
- 4) A culvert will be required within the existing ditch lines to maintain roadside drainage. The minimum culvert size within State maintained right of way shall be 15" unless otherwise approved by the Department. Pipe sizing calculations should be submitted as part of the site plan. 9" of cover over the culvert pipe is required and the culvert pipe should extend a minimum of one foot beyond the toe of the stabilized slope.
- 5) Sight distance for entrances must be evaluated for compliance in accordance with Appendix F of the VDOT Road Design Manual. Sight distance lines shall be shown to scale on the site plans.

Based upon the provided photographs, some of the proposed entrances appear to be deficient in sight distance and may require final location adjustments during the site plan process.

- 6) VDOT will assist Sussex County in reviewing proposed Traffic Management Plans, roadway condition evaluations, and repair plans in accordance with the proposed CUP conditions, particularly numbers 4(a)(i), 4(b)(i), and 4(b)(ii).
- 7) Given site construction along Beaverdam Road, it is possible trucks may consider utilizing the rail crossing on Route 606 located in the Town of Waverly. This crossing is steep with limited area between Route 460 and the railroad and is generally not suitable for tractor trailer traffic. Recommend including restriction of use of this crossing for truck traffic.

ADVISORY

- a) Upon final plan approval, a Land Use Permit will be required prior to performing any work within State maintained right of way limits or easements. Additional information about Land Use Permitting as well as the required forms can be found on the VDOT website at:

<http://www.virginiadot.org/business/bu-landUsePermits.asp>

If you have any questions, please contact me at 757-346-3068 or Joshua.Norris@vdot.virginia.gov.

Sincerely,



Joshua R. Norris
Land Use Engineer
Virginia Department of Transportation
Franklin Residency

Beverly Walkup

From: Bellville-marrion, Jennifer (DHR) <Jennifer.Bellville-Marrion@dhr.virginia.gov>
Sent: Tuesday, December 5, 2023 2:54 PM
To: mpoarch@sussexcountyva.gov
Cc: Kirchen, Roger (DHR)
Subject: Re: Blackwater Solar CUP Application Review- 2nd Submittal

You don't often get email from jennifer.bellville-marrion@dhr.virginia.gov. [Learn why this is important](#)

CAUTION: This email originated from outside of the organization. Do not follow guidance, click links, or open attachments unless you know the content is safe.

Mr. Poarch,

Thank you for your email regarding the the Blackwater Solar project.

The Environmental Resource Impact Analysis states: "There are two previously recorded architectural resources and one previously recorded archaeological resource within the project area. There are two hundred and twenty-six architectural resources and thirty-nine archaeological resources within three miles of the project. Two of the architectural resources (DHR ID # 087-5552 and 091-0011) have been evaluated by VDHR and are listed National Register of Historic Places (NRHP) and the Virginia Landmarks Register (VLR). Ten of the architectural resources (DHR ID # 320-0001, 091-5058, 091-0103, 087-5492, 091-5062, 091-5071, 091,0098, 320-5078, 320-0002, and 091-5098) are evaluated as eligible or potentially eligible for listing on the NHRP and VLR. The remaining architectural and archaeological resources have been determined not eligible or have not yet been evaluated." Given that there are multiple recorded resources in or near the project area, means there may be potential impacts to historic properties. In order to provide more detailed comments about the resources and potential impacts of the project, DHR recommends that a phase I survey be conducted within the project area.

To date, DHR has not received a phase I survey for the solar project. Typically, for utility scale solar projects we recommend that a phase I cultural resources survey be conducted within the project area. The phase I survey should include an archaeological survey within the project area and an architectural survey of all architectural resources that are 45 years old and older within 0.5 miles of the proposed project area. We recommend that the survey and report be submitted to DHR for review and comment *prior* to submission to the SCC or DEQ permitting programs. Once we have received the survey report(s), DHR can provide more meaningful comments about potential impacts to historic properties.

If you have any questions, please let me know.

Sincerely,



Jenny Bellville-Marrion
Archaeologist
Department of Historic Resources

Email jennifer.bellville-marrion@dhr.virginia.gov
Phone 804-482-8091



2801 Kensington Ave, Richmond, VA 23221
www.dhr.virginia.gov

From: Kirchen, Roger (DHR) <roger.kirchen@dhr.virginia.gov>
Sent: Monday, December 4, 2023 9:42 AM
To: Bellville-marrion, Jennifer (DHR) <Jennifer.Bellville-Marrion@dhr.virginia.gov>
Subject: FW: Blackwater Solar CUP Application Review- 2nd Submittal

Roger W. Kirchen
Director, Review and Compliance Division
p: 804-482-6091
e: roger.kirchen@dhr.virginia.gov

From: Michael Poarch <mpoarch@sussexcountyva.gov>
Sent: Friday, December 1, 2023 7:17 PM
To: Fowler, Jason C., PE (VDOT) <jason.fowler@vdot.virginia.gov>; Norris, Joshua (VDOT) <joshua.norris@vdot.virginia.gov>; Michael Zehner <michael.zehner@bgllc.net>; Linds Edwards <linds.edwards@bgllc.net>; Hypes, Rene (DCR) <rene.hypes@dcr.virginia.gov>; Bassett, Jay S. (DOF) <jay.bassett@dof.virginia.gov>; Dowling, Zachary H. (DOF) <zach.dowling@dof.virginia.gov>; Robb, Jaime Lynn B. (DEQ) <jaimie.robb@deq.virginia.gov>; Gwynn, Becky (DWR) <becky.gwynn@dwr.virginia.gov>; Town of Wakefield <wakefieldtown3@verizon.net>; Beth Lewis <blewis@southamptoncounty.org>; Kirchen, Roger (DHR) <roger.kirchen@dhr.virginia.gov>; Nick Sheffield <nsheffield@sussexcountyva.gov>
Cc: Beverly Walkup <bwalkup@sussexcountyva.gov>
Subject: Blackwater Solar CUP Application Review- 2nd Submittal

Good Afternoon,

I wanted to follow up with all of you on the proposed Blackwater Solar project. The applicant has resubmitted a revised application to address some of its deficiencies from the initial review. We would appreciate any feedback or comments from each respective agency and/or department.

Please see forward link below to access the documents for your review and reference. We would like all comments or feedbacks prior to the end of the year if possible. If you have any issues accessing the link below, please let us know.

[OneDrive_2023-11-30.zip](#)

Sincerely,

M. Poarch
County Planner
Sussex County Planning & Zoning Department

From: Michael Poarch <mpoarch@sussexcountyva.gov>
Sent: Thursday, May 11, 2023 11:49 AM
To: Fowler, Jason <jason.fowler@vdot.virginia.gov>; joshua.norris@vdot.virginia.gov <joshua.norris@vdot.virginia.gov>; Michael Zehner <michael.zehner@bgllc.net>; Lindsay Edwards <lindsay.edwards@bgllc.net>; Luke Peters <luke.peters@bgllc.net>; rene.hypes@dcr.virginia.gov <rene.hypes@dcr.virginia.gov>; Bassett, Jay S. (DOF) <jay.bassett@dof.virginia.gov>; zach.dowling@dof.virginia.gov <zach.dowling@dof.virginia.gov>; Jaime Bauer Robb <jaime.robb@deq.virginia.gov>; becky.gwynn@dwr.virginia.gov <becky.gwynn@dwr.virginia.gov>; Nick Sheffield <nsheffield@sussexcountyva.gov>
Cc: Beverly Walkup <bwalkup@sussexcountyva.gov>
Subject: Fw: Blackwater Solar CUP Application Review

Good Afternoon,

I hope everyone is doing well. We received a conditional use permit application for Blackwater Solar. As part of the review, we wanted to gather initial feedback or comments from each respective agency and/or department.

Brief Description

The Conditional Use Permit application is for Blackwater Solar which proposes to develop a hybrid 600MW Solar, 400MW energy storage generation facility. The project is located within the Wakefield area near the Southeast 4-H Educational Center.

Please see forward link below to access the documents for your review and reference. We would like all comments or feedbacks prior to June 16 if possible. If you have any issues accessing the link below, please let us know.

Sincerely,

M. Poarch
County Planner
Sussex County Planning & Zoning Department

From: Ed Rumler <Ed.rumler@clenera.com>
Sent: Wednesday, May 10, 2023 7:57 PM
To: Beverly Walkup <bwalkup@sussexcountyva.gov>; Michael Poarch <mpoarch@sussexcountyva.gov>
Cc: Walker Mitchell <Walker.Mitchell@clenera.com>; Romine, Stephen <sromine@williamsmullen.com>
Subject: Blackwater Solar CUP Application

CAUTION: This email originated from outside of the organization. Do not follow guidance, click links, or open attachments unless you know the content is safe.

Good evening Beverly, Michael,

I am pleased to officially submit the digital copy of the Blackwater Solar Conditional Use Permit application. The files can be found in the folder linked below – they were too large to attach to this email.



[Blackwater CUP Application - Combined Files](#)

Per our meeting a few weeks ago, we are having two hard copies of the application delivered to your office before the end of the week. We also separately mailed a check for the application fee at the end of last week.

The application includes a lot of information, so please don't hesitate to reach out if we can be of help in any way.

Thanks in advance for your time and consideration. We're looking forward to hearing your feedback.

Best,
Ed

Ed Rumler
Director of Development

Clēnera - an Enlight Company
800 W. Main St., Suite 900 | Boise, ID 83702
PO Box 2576 | Boise, Idaho 83701
Mobile: 517-292-9476
www.clenera.com

Beverly Walkup

From: Martin, Amy (DWR) <Amy.Martin@dwr.virginia.gov>
Sent: Thursday, December 21, 2023 2:38 PM
To: mpoarch@sussexcountyva.gov
Cc: Gwynn, Becky (DWR); Norris, David (DWR)
Subject: DWR - Blackwater Solar updated CUP application
Attachments: DWR-Sussex_BlackwaterSolar_June2023.pdf

You don't often get email from amy.martin@dwr.virginia.gov. [Learn why this is important](#)

CAUTION: This email originated from outside of the organization. Do not follow guidance, click links, or open attachments unless you know the content is safe.

Mr. Poarch,

Thank you for making the updated CUP application for the proposed Blackwater Solar project available for our review. The only application deficiency noted that is of significant interest to us was about the width of wildlife corridors. We understand from the applicant's response that the widths of such corridors will be dependent upon final site design. As such, we have nothing to add to the attached comments, which we provided to you in June 2023.

We look forward to working with you on continued evaluation of the proposed solar facility.

Thank you,
Amy



Amy Martin

(she/her/hers)

Manager, Nongame and Endangered Species Program

Acting Manager, Wildlife Information and Environmental Services

Cell: 804-481-5296

Virginia Department of Wildlife Resources

CONSERVE. CONNECT. PROTECT.

7870 Villa Park Dr., P.O. Box 90778, Henrico, VA 23228-0778

www.dwr.virginia.gov



COMMONWEALTH of VIRGINIA
Department of Wildlife Resources

Travis A. Voyles
*Secretary of Natural
and Historic Resources*

Ryan J. Brown
*Executive
Director*

June 16, 2023

Mr. Michael Poarch
County Planner
Sussex County Planning & Zoning Department
20135 Princeton Rd
Sussex, VA 23884

Dear Mr. Poarch:

I am writing on behalf of the Virginia Department of Wildlife Resources (DWR) regarding the conditional use permit (CUP) application submitted to you by Clénara for the proposed Blackwater Solar Project (project). The proposed project is a hybrid 600MW solar, 400 MW energy storage facility located on 18 privately owned parcels held by 18 landowners in Sussex County. The project totals approximately 8,355 acres, however only 4,800 acres is included within the “disturbance area.” According to the CUP application, the project will include more than 500 acres of pollinator habitat, more than 40 miles of wildlife corridor, and more than 2,000 acres of preserved forestland. The current land uses within the project area include commercial pine plantation (84.5%), mixed forest (12.7%), and traditional agriculture (2.9%).

The property proposed for development is located immediately adjacent to the Virginia Department of Forestry’s (DOF) Big Woods State Forest (Big Woods SF), which abuts our Big Woods Wildlife Management Area (Big Woods WMA). These two parcels are managed together as one unit to promote the conservation and management of federal endangered red-cockaded woodpeckers (RCWs), northern bobwhites (quail; a Species of Greatest Conservation Need (SGCN)), wild turkey, and other grassland species like prairie warblers and pine woods tree frogs. Management activities towards this goal include pine stand thinning and prescribed fire within the understory. Recreational opportunities at the Big Woods WMA include hunting, trapping, hiking, wildlife watching, and camping. However, there are portions of the WMA that are closed to certain types of recreation to protect the important and sensitive endangered species recovery and habitat management activities that we and our conservation partners perform on site. In addition, The Nature Conservancy’s (TNC) Piney Grove Preserve, first established in 1998 to support translocations of RCWs from North Carolina, is located immediately north of the Big Woods WMA/Big Woods SF complex. We work closely with TNC, the U.S. Fish and Wildlife Service (Service), the Virginia Department of Conservation and Recreation (DCR)

7870 VILLA PARK DRIVE, SUITE 400, P.O. BOX 90778, HENRICO, VA 23228
Equal Opportunity Employment, Programs and Facilities

and DOF on regional initiatives to restore this imperiled bird and its habitat back to its historic range within Virginia.

As we contemplate the potential for a large solar energy development and storage facility located within such close proximity of lands we own and manage with our partners, a number of priority topics that we believe should be fully considered by the Sussex County Planning and Zoning Department include the potential for increased human-wildlife conflict; impacts to hydrologic functions at Big Woods WMA and surrounding properties; restrictions on management activities at Big Woods WMA and/or Big Woods SF, most of which support endangered species protection and management; impacts on the use of the Big Woods WMA and natural lands in Sussex County for wildlife-related recreation; and impacts to at-risk species. Specifically, we would like to work with Sussex County and Clénara to ensure the following issues are fully considered during permitting, design, and development of the site:

1. Consideration of one or more significant wildlife corridors that allows wildlife to pass safely through the project sites from habitat patch to habitat patch and that allows access to streams on site. Not only will this pass animals safely, but it may also help reduce human-wildlife interactions. We encourage the County to study opportunities to implement such corridors, and we are happy to provide more specific information that will benefit key wildlife species in this assessment.
2. We understand that the project is currently designed to provide 150-foot buffers along the perimeter of the project and support this feature. We also recommend significant natural buffers along streams and wetlands on site. Large riparian buffers protect water quality, stream stability and instream and riparian habitats over the long term. This is a necessary consideration, considering the proposed 40-year life of this project. In addition, depending on the size and location, forested buffers may reduce resistance to necessary habitat management actions that the DWR will need to continue to employ on our property, including use of prescribed fire. Buffers would also provide natural separation between hunters and other users of the WMA and human activity on the developed property.
3. An evaluation of groundwater mining and hydrologic function (including runoff and stormwater retention) will be important to understanding the impacts of any development or change of designation on the hydrologic function and habitat restoration activities currently underway at Big Woods WMA and/or that may affect our Lake Airfield, located nearby. Our staff can provide additional input and insights into what such an evaluation should consider. This area of Sussex County also includes many vernal wetland ponds that are important habitats for at-risk amphibians and reptiles.
4. The conservation of habitat for federal endangered RCWs, state threatened Bachman's Sparrows, SGCN northern bobwhites (quail), state endangered Rafinesque's eastern big-

Mr. Michael Poarch
June 15, 2023
Page 3

eared bats, federal endangered northern long-eared bats, SGCN southeastern fox squirrels, and other wildlife is a priority for DWR. We welcome the opportunity to collaborate with the County in the evaluation and identification of priority habitats and habitat restoration opportunities, in alignment with Virginia's Wildlife Action Plan and other habitat management and restoration plans.

As you may know, the Big Woods WMA was acquired and is now managed in part using Federal grant funds from the Service, requiring that those lands be used for their authorized purposes and remain under ownership and management control of the DWR. Any impacts on the Big Woods WMA, or our ability to properly manage it, or the ability for the public to access and use it that result from development and/or operation of the proposed solar energy and storage site must be considered in this context.

We also want to note that this project proposes conversion of a significant acreage of forested habitat to solar panels and related infrastructure, fragmenting currently intact forested habitats. Forest fragmentation results in loss of interior forested habitat, facilitates colonization by invasive species, and introduces new predator/prey relationships along the new forest edge and within adjacent habitats. We urge the applicant to consider these long-term impacts and to minimize them to the greatest extent possible. We recommend coordination with the DOF and DCR regarding an assessment of the forest fragmentation impacts and necessary mitigation to offset such impacts.

To best minimize impacts on wildlife and their habitats during construction and operation of solar facilities, we also recommend adherence to the attached Solar Energy Facility Construction and Operation Recommendations. In particular, we recommend that the fences enclosing solar arrays (pods) either be 61 inches or less in height, so that deer will have easy ingress and egress to/from the enclosure, or that the fences (including barbed wire if desired) be at least 96 inches in height, so that deer would not normally enter the site.

I look forward to working with Sussex County to ensure that, if this site is developed, wildlife and their habitats are appropriately protected and managed, impacts to the Big Woods WMA and control over it are avoided, and that the region remains available to eco-tourism and other outdoor recreation. Please do not hesitate to contact me at 804-389-3953 or Becky.Gwynn@dwr.virginia.gov if you have any questions or need more information.

Sincerely,



Rebecca K. Gwynn
Deputy Director

From: Nick Sheffield <nsheffield@sussexcountyva.gov>
Sent: Friday, February 2, 2024 5:48 AM
To: Michael Poarch <mpoarch@sussexcountyva.gov>
Subject: Re: Blackwater Solar CUP Application Review- 2nd Submittal

Michael,

My main comments are as follows. Since this started before my tenure with the county, I am unsure what may have been agreed upon outside of what is written in the provided documents.

1. If a structure is built or brought in, we will want to review the site plans for the structure. We will review for Fire & Rescue needs and compliance with the Virginia Statewide Fire Prevention Code.
2. Training shall be provided at times that work for our volunteers and staff. It appears this is covered.
3. All gates shall be labeled with the address, gate number, and emergency contact information. There shall also be a padlock that is paid for by the applicant or developer which is strictly for Fire & Rescue use. This padlock shall be a Knox brand padlock and shall be positioned in a way that if we unlock the FD padlock, we have unobstructed access. At no time shall we not be able to access the facility by unlocking our padlock. (ex. failure to daisy chain padlocks, removal of padlock, etc.)
4. Fire apparatus access roads will need to be placed throughout the facility in a manner that allows us within 250' of all points of solar panels. I will want to review the placement of these access roads, which shall be capable of withstanding an imposed load of 75,000 pounds in all weather conditions. Approved turnarounds for emergency vehicles will need to be provided on dead-end access roads.
5. Emergency Procedures/Plans shall be submitted to the Chief of Fire & Rescue prior to beginning operations.
6. A clean site plan with gates, numbers, addresses, special landmarks, etc. shall be provided to the Chief of Fire & Rescue prior to beginning operations.
7. The application discusses water sources for Fire & Rescue usage. We will need to discuss what can be provided. This may be in the form of dry hydrants.

Please change the language from Public Safety Coordinator to Chief of Fire & Rescue so that it is accurately referencing my position; we no longer use the Public Safety terminology.

Respectfully,



Nick Sheffield
Chief of Fire & Rescue
Phone: 434-632-1135
Mobile: 804-691-2582
Email: nsheffield@sussexcountyva.gov
PO Box 1397
Sussex, VA 23884

Travis A. Voyles
Secretary of Natural and Historic Resources

Frank N. Stovall
Deputy Director
for Operations

Matthew S. Wells
Director

Darryl Glover
Deputy Director for
Dam Safety,
Floodplain Management and
Soil and Water Conservation

Andrew W. Smith
Chief Deputy Director

Laura Ellis
Deputy Director for
Administration and Finance



COMMONWEALTH of VIRGINIA
DEPARTMENT OF CONSERVATION AND RECREATION

December 29, 2023

Michael Poarch
Sussex County
20135 Princeton Road
Sussex, Virginia 23884

Re: Blackwater Solar Conditional Use Permit

Dear Mr. Poarch:

The Department of Conservation and Recreation's Division of Natural Heritage (DCR) has searched its Biotics Data System for occurrences of natural heritage resources from the area outlined on the submitted map. Natural heritage resources are defined as the habitat of rare, threatened, or endangered plant and animal species, unique or exemplary natural communities, and significant geologic formations.

According to the information in our files, the Drumwright Pond and the Manry Sinkhole Ponds N - Airfield Millpond Conservation Sites are located within the project area. Conservation sites are tools for representing key areas of the landscape that warrant further review for possible conservation action because of the natural heritage resources and habitat they support. Conservation sites are polygons built around one or more rare plant, animal, or natural community designed to include the element and, where possible, its associated habitat, and buffer or other adjacent land thought necessary for the element's conservation. Conservation sites are given a biodiversity significance ranking based on the rarity, quality, and number of element occurrences they contain; on a scale of 1-5, 1 being most significant.

The Drumwright Pond Conservation Site has been assigned a biodiversity rank of B5, which represents a site of general interest/open space significance. The natural heritage resources associated with this site are:

Utricularia purpurea Purple Bladderwort G5/S2/NL/NL

The Purple Bladderwort a state rare aquatic plant, inhabits ponds and ditches as well as other slow-moving waters (Weakley, in prep.). This plant produces purple flowers from May to June (Radford et. al., 1968). Purple bladderwort is currently known from five locations in Virginia's coastal plain.

The Manry Sinkhole Ponds N - Airfield Millpond Conservation Site has been assigned a biodiversity rank of B2, which represents a site of very high significance. It is one of Virginia's Essential Conservation Sites (ECS) that is considered critical for achieving statewide biodiversity conservation goals. The natural heritage resources associated with this site are:

Coastal Plain / Outer Piedmont Acidic Seepage Swamp G3/S3/NL/NL

600 East Main Street, 24th Floor | Richmond, Virginia 23219 | 804-786-6124

State Parks • Soil and Water Conservation • Outdoor Recreation Planning
Natural Heritage • Dam Safety and Floodplain Management • Land Conservation

	Coastal Plain Seasonal Pond (Swamp Tupelo - Overcup Oak Type)	G1G2/S1S2/NL/NL
<i>Anaxyrus quercicus</i>	Oak Toad	G5/S2/NL/NL
<i>Eleocharis baldwinii</i>	Baldwin's spikerush	G4G5/S1/NL/NL
<i>Sarracenia purpurea</i>	Purple pitcher plant	G5/S2/NL/NL
<i>Utricularia purpurea</i>	Purple Bladderwort	G5/S2/NL/NL
<i>Corynorhinus rafinesquii macrotis</i>	Eastern Big-eared bat	G3G4T3/S2/NL/LE
<i>Dryobates borealis</i>	Red-cockaded Woodpecker	G3/S1/LE/LE

The Coastal Plain/Outer Piedmont Seepage Swamp contains forested vegetation of braided headwaters stream bottoms and seeping toe-slopes saturated by abundant groundwater discharge. Classified units in the group separate along a gradient of soil fertility and groundwater chemistry, which range from extremely acidic and nutrient-poor to highly calcareous. Despite the wide variation in substrate status, the communities in the group share hydrologically and topographically similar habitats, as well as many wetland species that tolerate a wide range of soil conditions. The acidic seepage swamps occur primarily in the Coastal Plain, are characterized by *Sphagnum*-covered hummocks in a sandy or peaty substrate. The habitats are generally wet and somewhat protected from fire, although adjacent upland forests are generally pyrophytic; there is little doubt that prior to widespread exclusion of wildfires, fire occasionally burned into these habitats during dry periods.

Several uncommon odonates (dragonflies and damselflies) depend on forested seeps for breeding habitat. Coastal Plain / Piedmont seepage swamps are relatively small in size and threatened by beaver activities, agricultural pollutants, hydrologic disturbances, and logging. The ash component of these swamps is currently under major stress from outbreaks of the insect pathogen Emerald Ash Borer. The extensive tree mortality and gap disturbances associated with this pest will almost certainly lead to long-term compositional changes and increased susceptibility to invasive weeds.

The Coastal Plain Seasonal Pond (Swamp Tupelo - Overcup Oak Type) community is a subset of a diverse group of poorly drained basin wetlands characteristic of flat Coastal Plain terraces with fluctuating, seasonally perched water tables. Similar wetlands are scattered throughout the mid-Atlantic Coastal Plain. The best-documented examples of this group in Virginia are the Grafton Ponds, located on The Peninsula in York County, but other sizeable complexes occur on Coastal Plain terraces in Dinwiddie, Surry, Isle of Wight, Gloucester, and Matthews Counties. Also included are the seasonally exposed shores of Lake Drummond, a 1,287 ha (3,180 ac) natural basin in the Great Dismal Swamp. South of the James River, two community types in this group extend into the eastern Piedmont, where they are associated with hardpan soils. Most of these wetlands are seasonally flooded and are believed to be sinkhole features that formed through dissolution of underlying carbonate-rich, shell marl deposits. The marl deposits are too deep to influence soil or water chemistry of the depressions, which are strongly acidic in most examples. A few depressions in extreme southeastern Virginia appear to have originated from deep peat burn-outs. Although the term "vernal pond" has been applied to some of the communities in this group, that name is a poor descriptor of the hydrology and the large size of many occurrences.

Vegetation in this group varies from forested to entirely herbaceous, representing a sizeable number of distinct community types. Depth and duration of seasonal inundation are apparently the most important factors influencing community composition and the degree to which woody species become established. Dry-season fires in adjacent uplands may spread into ponds and may be another factor limiting the invasion of woody species, although fire frequencies throughout the region have been much reduced in recent decades.

Coastal Plain depression swamps and ponds are relatively rare, small-patch communities that provide important habitat for the state-rare chicken turtle (*Deirochelys reticularia*) and three rare, two of which are state listed, amphibians: Mabee's salamander (*Ambystoma mabeei*), tiger salamander (*Ambystoma tigrinum*), and barking tree frog (*Hyla gratiosa*). In addition, the globally rare plants Harper's fimbriatylis (*Fimbristylis perpusilla*) and pondspice (*Litsea aestivalis*) are confined to these habitats in Virginia (Fleming et. al, 2021).

DCR acknowledges that a section of the Manry Sinkhole Ponds N - Airfield Millpond Conservation Site has been removed from the project area based on the updated project boundaries. However, DCR still has concerns about the sections of the conservation site being developed and continues to recommend the avoidance of both conservation sites. In addition, DCR recommends the avoidance of tree removal and soil disturbance in any forested wetlands and leaving a forest buffer around any isolated wetlands including but not limited to seasonal depression ponds. DCR recommends the avoidance of rare plant occurrences within the project area, including a buffer to preserve the habitat conditions.

Furthermore, based on review of the project by DCR biologists, there is potential for this site to support additional occurrences of the documented significant communities and other associated natural heritage resources. Therefore, DCR recommends an inventory for significant natural communities across the project area. This inventory should be conducted when water levels in the swamp are low or drawn down which typically occurs in the late summer or early fall. The seasonal depression ponds that are components of these significant communities provide breeding habitat for several rare amphibians. DCR also recommends an inventory for the oak toad, the barking tree frog (*Hyla gratiosa*, G5/S2S3/NL/NL), the Mabee's salamander (*Ambystoma mabeei*, G4/S1S2/NL/LT), and the tiger salamander (*Ambystoma tigrinum*, G5/S1/NL/LE).

In addition to the rare plant resources associated with the Drumwright Pond and the Manry Sinkhole Ponds N - Airfield Millpond Conservation Sites, there are historical occurrences of the following rare plants documented in the vicinity of the project area: Large spreading pogonia (*Cleistesiosis divaricata*, G4/S1/NL/NL), Three-angled spikerush (*Eleocharis tricostata*, G4/S1/NL/NL), Ten-angled pipewort (*Eriocaulon decangulare* var. *decangulare*, G5T5?/S2/NL/NL), Thread-leaved beaksedge (*Rhynchospora filifolia*, G5/SH/NL/NL), Short-beaked beaksedge (*Rhynchospora nitens*, G4?/SH/NL/NL), Lance-leaved rose-gentian (*Sabatia difformis*, G4G5/S1/NL/NL) and Bosc's Bluets (*Oldenlandia boscii*, G5/S1/NL/NL).

Due to the large area and variety of timber ages, wetlands, and clearings that exist in the project area, there is potential for a variety of Coastal Plain rare plants to exist on site, including but not limited to the species currently and historically documented. Additionally, according to DCR's predicted suitable habitat modeling and review by a DCR biologist which included a review of site photos, there is a potential for the Bachman's sparrow (*Peucaea aestivalis*, G3/SHB/NL/LT) to occur in previously timbered sections of the project area if suitable habitat exists on site. Therefore, DCR also recommends an inventory for any rare flora and Bachman's sparrow within the project area.

With the survey results, we can more accurately evaluate potential impacts to natural heritage resources and offer specific protection recommendations for minimizing impacts to the documented resources. DCR-Division of Natural Heritage biologists are qualified to conduct inventories for rare, threatened, and endangered species. Please contact Anne Chazal, Natural Heritage Chief Biologist, at anne.chazal@dcr.virginia.gov or 804-786-9014 to discuss availability and rates for field work. For a list of USFWS-approved surveyors in Virginia, visit <https://www.fws.gov/media/collection-approved-surveyor-lists-project-review-process-virginia>.

Due to the legal status of the Red-cockaded Woodpecker, DCR recommends coordination with the Virginia Department of Wildlife Resources (VDWR) and the United States Fish and Wildlife Services (USFWS) to ensure compliance with protected species legislation. Due to the legal status of the Bachman's sparrow, the Mabee's salamander, and the tiger salamander, DCR recommends coordination with Virginia's regulatory authority for the management and protection of these species, the VDWR, to ensure compliance with the Virginia Endangered Species Act (VA ST §§ 29.1-563 – 570).

There is also potential for the Eastern big-eared bat to occur in bottomland habitats in the Assamoosick Swamp, as well as any other forested wetlands including those associated with Drumwright Pond in the eastern tract. DCR recommends avoiding tree removal and assessing any large potential roost trees and/or abandoned structures on the property for bat presence/absence. DCR also recommends coordination with DWR for the Eastern big-eared bat becomes necessary to ensure compliance with the Virginia Endangered Species Act (VA ST §§ 29.1-563 – 570).

DCR supports the following conditions as outlined in the “Application to Sussex County, Virginia for Conditional Use Permit”:

- The use of native grasses and herbaceous material under and around the panel zone, as stated on page 17 of the CUP application (see additional comments below).
- Prohibit use of vegetation types classified by VADEQ or DCR as invasive.
- Development of a vegetation management plan as included in Exhibit E.
- Monitoring the site for the lifetime of the project using the Pollinator-Smart Comprehensive Manual Monitoring Protocol and the development of an adaptive invasive species monitoring plan as stated in the vegetated management plan, Exhibit E.
- The inclusion of the continued maintenance of the site according to the submitted vegetation management plan, and the use of native vegetation and pollinator species were possible as conditions of the conditional use permit.
- The planting of Virginia native pollinator plant species that bloom throughout the spring, summer, and fall to maximize benefits to native pollinators.
- The use of native plants as defined by the Virginia Native Plant Finder <https://www.dcr.virginia.gov/natural-heritage/native-plants-finder> in the retention basin mix, pollinator buffer mix, and buffer tree species lists in the Landscaping Plan.
- The implementation of the pollinator and bird habitat that was indicated in the Pollinator-Smart score card to achieve the score of 99.

DCR supports the inclusion of an invasive species management plan for the project in the Conditional Use Permit (CUP) submitted to Sussex County and adherence to the management plan and monitoring for the life of the project. DCR recommends invasive species be defined as those species included on the most recent DCR invasive species list (<https://www.dcr.virginia.gov/natural-heritage/document/nh-invasive-plant-list-2014.pdf>). DCR supports the project seeking Virginia Pollinator-Smart certification (<https://www.dcr.virginia.gov/natural-heritage/pollinator-smart>) as stated in the CUP and supports the inclusion of Virginia native pollinator plant species in the seed mixes and recommends including plants that bloom throughout the spring, summer and fall, to maximize benefits to native pollinators. DCR supports planting these species in the buffer areas of the planned facility and recommends considering including these species in other areas within the project site. For screening zones outside the perimeter fencing and in the proposed reforested areas, DCR supports the inclusion of native species appropriate for the region.

The following comments are based on the landscaping plan dated April 27, 2023, from the CUP application. DCR supports the use of Virginia Natives and concurs that all species in “Native Detention Basin Seed Mix” and “Native Solar Pollinator Buffer Mix” are Virginia natives. DCR has evaluated both seed lists using the Virginia Native Plant Finder (formally the solar site native plant finder). DCR recommends replacing the following species in the “Native Solar Pollinator Buffer Mix”: Wild Bergamot and Brown-eyed Susan. While these species are both native to Virginia, they are rare or infrequent in the Coastal Plain according to the [Digital Atlas of the Virginia Flora](#) and therefore, not recommended for planting in Sussex County as they may fail to thrive on site.

The CUP application states on page 17 that “native grass species and herbaceous material” will be planted in the panel zone. However, based on a review by DCR of the “Solar Farm Seed Mix” that the landscaping plan indicates will be used in the panel zone, there are no Virginia native species in the mix. DCR recommends replacing this mix with a seed mix of Virginia native species including native grasses or considering using the “Native Solar Pollinator Buffer Mix” in these areas. DCR recommends replacing the Eastern Red Cedar “Brodie” cultivar with the non-cultivar native species. DCR also supports the inclusion of Virginia ecotypes and recommends their use whenever feasible. Additionally, according to the Floral of Virginia, the nativity for the Red osier dogwood in Virginia is uncertain, Therefore, DCR recommends replacing this species in the reforestation plan with another native species. Additional guidance on plant species can be found here: <http://www.dcr.virginia.gov/natural-heritage/solar-site-native-plants-finder>. In addition, Virginia native species alternatives to the non-native species listed in the Virginia Erosion and Sediment Control Handbook

(Third Edition 1992), can be found in the 2017 addendum titled “Native versus Invasive Plant Species”, here: <https://www.deq.virginia.gov/home/showpublisheddocument?id=2466>. Page 3 of the addendum provides a list of native alternatives for non-natives commonly used for site stabilization including native cover crop species (i.e., Virginia wildrye).

Longleaf pine (*Pinus palustris*) is included in both the buffer plant list and reforestation plan in the Landscaping Plans for Blackwater Solar on plan sheets 5 and 6 dated April 27, 2023. Before European settlement Longleaf pine was one of the dominant forest species in southeastern Virginia, occurring south of the James River except on the Eastern Shore where it extended further north (Creighton et. al, 2014) Longleaf pine and its habitat have been largely decimated in Virginia, with less than 200 trees identified as part of those original populations, and DCR-DNH’s Stewardship section is heavily involved in the restoration of these habitats.

Longleaf pine does not thrive in the presence of competition and is adapted to fire ecosystems (Creighton et. al, 2014). For Longleaf pine to successfully establish, it needs an open canopy and little competition for soil nutrients. Therefore, Longleaf pine may fail to thrive under the current reforestation plan included on page C6.6 of the landscape plan.

The northern populations which covered southeastern Virginia and northeastern North Carolina, are genetically distinct from the southern populations which cover North Carolina, South Carolina and extends into Alabama and Georgia. Provenance studies conducted by the US Forest Service have found that when seedlings sourced from the southern populations are planted in Virginia, they are less likely to survive than seedlings sourced from the northern populations (Creighton et. al, 2014). DCR recommends that any longleaf pine planted at the site is sourced from the northern populations of longleaf pine.

Furthermore, the proposed project will impact Ecological Cores (C1, C3, C4 and C5) as identified in the Virginia Natural Landscape Assessment (<https://www.dcr.virginia.gov/natural-heritage/vaconvisvnl>). Mapped cores in the project area can be viewed via the Virginia Natural Heritage Data Explorer, available here: <http://vanhde.org/content/map>.

Ecological Cores are areas of at least 100 acres of continuous interior, natural cover that provide habitat for a wide range of species, from interior-dependent forest species to habitat generalists, as well as species that utilize marsh, dune, and beach habitats. Interior core areas begin 100 meters inside core edges and continue to the deepest parts of cores. Cores also provide the natural, economic, and quality of life benefits of open space, recreation, thermal moderation, water quality (including drinking water recharge and protection, and erosion prevention), and air quality (including sequestration of carbon, absorption of gaseous pollutants, and production of oxygen). Cores are ranked from C1 to C5 (C5 being the least significant) using nine prioritization criteria, including the habitats of natural heritage resources they contain.

Impacts to cores occur when their natural cover is partially or completely converted permanently to developed land uses. Habitat conversion to development causes reductions in ecosystem processes, native biodiversity, and habitat quality due to habitat loss; less viable plant and animal populations; increased predation; and increased introduction and establishment of invasive species.

DCR recommends avoidance of impacts to cores. When avoidance cannot be achieved, DCR recommends minimizing the area of impacts overall and concentrating the impacted area at the edges of cores, so that the most interior remains intact.

The proposed project will impact a core with outstanding ecological integrity. Further investigation of these impacts is recommended and DCR-DNH can conduct a formal impact analysis upon request. This analysis would estimate direct impacts to cores and habitat fragments and indirect impacts to cores. The final products of this analysis would include an estimate of the total impact of the project in terms of acres. For more information about the analysis and service charges, please contact Joe Weber, DCR Chief of Biodiversity Information and Conservation Tools at Joseph.Weber@dcr.virginia.gov.

Under a Memorandum of Agreement established between the Virginia Department of Agriculture and Consumer Services (VDACS) and the DCR, DCR represents VDACS in comments regarding potential impacts on state-listed threatened and endangered plant and insect species.

There are no State Natural Area Preserves under DCR's jurisdiction in the project vicinity. Please note, the project area is directly adjacent to Big Woods Wildlife Management Area, owned and managed by VDWR, and Big Woods State Forest, owned and managed by the Virginia Department of Forestry (VDOF). DCR recommends coordination with both VDWR and VDOF to avoid impacts to these state resources from the proposed project.

New and updated information is continually added to Biotics. Please re-submit a completed order form and project map for an update on this natural heritage information if the scope of the project changes and/or six months has passed before it is utilized.

The U.S. Fish and Wildlife Service (USFWS) utilizes an online project review process (<https://www.fws.gov/office/virginia-ecological-services/virginia-field-office-online-review-process>) to facilitate compliance with the Endangered Species Act (16 U.S.C. 1531-1544, 87 Stat. 884) (ESA), as amended. The process enables users to 1) follow step-by-step guidance; 2) access information that will allow them to identify threatened and endangered species, designated critical habitat, and other Federal trust resources that may be affected by their project; and 3) accurately reach determinations regarding the potential effects of their project on these resources as required under the ESA. If you have questions regarding the online review process, please contact Rachel Case at rachel_case@fws.gov.

The Virginia Department of Wildlife Resources (VDWR) maintains a database of wildlife locations, including threatened and endangered species, trout streams, and anadromous fish waters that may contain information not documented in this letter. Their database may be accessed <https://services.dwr.virginia.gov/fwis/> or contact Amy Martin at 804-367-2211 or amy.martin@dwr.virginia.gov.

Should you have any questions or concerns, feel free to contact me at 804-371-2708. Thank you for the opportunity to comment on this project.

Sincerely,



S. René Hypes
Natural Heritage Project Review Coordinator

Cc: Amy Martin, VDWR
Terry Lasher, VDOF
Rebecca Wilson, DCR-Stewardship

Literature Cited

- Creighton, J., Cumbia, D., Darden, H., van Eerden, B., Myers, R., Sheridan, P. 2014. From the Brink! The Effort to Restore Virginia's Native Longleaf Pine. Virginia Department of Forestry Status Report.
- Fleming, G.P., K.D. Patterson, and K. Taverna. 2021. The Natural Communities of Virginia: A Classification of Ecological Community Groups and Community Types. Third approximation. Version 3.3. Virginia Department of Conservation and Recreation, Division of Natural Heritage, Richmond, VA.
www.dcr.virginia.gov/natural-heritage/natural-communities/ [Accessed: 09-11-2022]
- Handley, C.O., and D. Schwab. 1991. Eastern big-eared bat. In Virginia's Endangered Species: Proceedings of a Symposium. K. Terwilliger ed. The McDonald and Woodward Publishing Company, Blacksburg, Virginia. p. 571-573.
- Harvey, M.J. 1992. Bats of the Eastern United States. Arkansas Game and Fish Commission, Little Rock, Arkansas. pp.46
- NatureServe. 2009. NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.1. NatureServe, Arlington, Virginia. Available <http://www.natureserve.org/explorer>. (Accessed: March 31, 2010).
- Oberholser, H.C. 1974. The bird life of Texas. 2 vols. Univ. of Texas Press, Austin.
- Radford, A.E., H.A. Ahles, C.R. Bell. 1968. Manual of the Vascular Flora of the Carolinas. University of North Carolina Press, Chapel Hill. p. 969.
- Ridd, S. 1991. Bachman's Sparrow. In Virginia's Endangered Species: Proceedings of a Symposium. K. Terwilliger ed. The McDonald and Woodward Publishing Company, Blacksburg, Virginia.
- The Nature Conservancy and The Network of Natural Heritage Programs and Conservation Data Centers. 1999. Natural Heritage Conservation Databases. Accessed through the Biosource web site project. The Nature Conservancy, Arlington, VA. (7/1499).
- Watts, B.D., M. D. Wilson, and D.S. Bradshaw. 1998. A survey of the Bachman's sparrow in southeastern Virginia. *The Raven* 69(1): 9 – 14.
- Weakley, A.S. In prep. *Flora of the Carolina's and Virginia*. The Nature Conservancy, Southeastern Regional Office. p. 10-24.



COMMONWEALTH of VIRGINIA
Department of Wildlife Resources

Travis A. Voyles
*Secretary of Natural
and Historic Resources*

Ryan J. Brown
*Executive
Director*

June 16, 2023

Mr. Michael Poarch
County Planner
Sussex County Planning & Zoning Department
20135 Princeton Rd
Sussex, VA 23884

Dear Mr. Poarch:

I am writing on behalf of the Virginia Department of Wildlife Resources (DWR) regarding the conditional use permit (CUP) application submitted to you by Clénara for the proposed Blackwater Solar Project (project). The proposed project is a hybrid 600MW solar, 400 MW energy storage facility located on 18 privately owned parcels held by 18 landowners in Sussex County. The project totals approximately 8,355 acres, however only 4,800 acres is included within the “disturbance area.” According to the CUP application, the project will include more than 500 acres of pollinator habitat, more than 40 miles of wildlife corridor, and more than 2,000 acres of preserved forestland. The current land uses within the project area include commercial pine plantation (84.5%), mixed forest (12.7%), and traditional agriculture (2.9%).

The property proposed for development is located immediately adjacent to the Virginia Department of Forestry’s (DOF) Big Woods State Forest (Big Woods SF), which abuts our Big Woods Wildlife Management Area (Big Woods WMA). These two parcels are managed together as one unit to promote the conservation and management of federal endangered red-cockaded woodpeckers (RCWs), northern bobwhites (quail; a Species of Greatest Conservation Need (SGCN)), wild turkey, and other grassland species like prairie warblers and pine woods tree frogs. Management activities towards this goal include pine stand thinning and prescribed fire within the understory. Recreational opportunities at the Big Woods WMA include hunting, trapping, hiking, wildlife watching, and camping. However, there are portions of the WMA that are closed to certain types of recreation to protect the important and sensitive endangered species recovery and habitat management activities that we and our conservation partners perform on site. In addition, The Nature Conservancy’s (TNC) Piney Grove Preserve, first established in 1998 to support translocations of RCWs from North Carolina, is located immediately north of the Big Woods WMA/Big Woods SF complex. We work closely with TNC, the U.S. Fish and Wildlife Service (Service), the Virginia Department of Conservation and Recreation (DCR)

7870 VILLA PARK DRIVE, SUITE 400, P.O. BOX 90778, HENRICO, VA 23228
Equal Opportunity Employment, Programs and Facilities

and DOF on regional initiatives to restore this imperiled bird and its habitat back to its historic range within Virginia.

As we contemplate the potential for a large solar energy development and storage facility located within such close proximity of lands we own and manage with our partners, a number of priority topics that we believe should be fully considered by the Sussex County Planning and Zoning Department include the potential for increased human-wildlife conflict; impacts to hydrologic functions at Big Woods WMA and surrounding properties; restrictions on management activities at Big Woods WMA and/or Big Woods SF, most of which support endangered species protection and management; impacts on the use of the Big Woods WMA and natural lands in Sussex County for wildlife-related recreation; and impacts to at-risk species. Specifically, we would like to work with Sussex County and Clénara to ensure the following issues are fully considered during permitting, design, and development of the site:

1. Consideration of one or more significant wildlife corridors that allows wildlife to pass safely through the project sites from habitat patch to habitat patch and that allows access to streams on site. Not only will this pass animals safely, but it may also help reduce human-wildlife interactions. We encourage the County to study opportunities to implement such corridors, and we are happy to provide more specific information that will benefit key wildlife species in this assessment.
2. We understand that the project is currently designed to provide 150-foot buffers along the perimeter of the project and support this feature. We also recommend significant natural buffers along streams and wetlands on site. Large riparian buffers protect water quality, stream stability and instream and riparian habitats over the long term. This is a necessary consideration, considering the proposed 40-year life of this project. In addition, depending on the size and location, forested buffers may reduce resistance to necessary habitat management actions that the DWR will need to continue to employ on our property, including use of prescribed fire. Buffers would also provide natural separation between hunters and other users of the WMA and human activity on the developed property.
3. An evaluation of groundwater mining and hydrologic function (including runoff and stormwater retention) will be important to understanding the impacts of any development or change of designation on the hydrologic function and habitat restoration activities currently underway at Big Woods WMA and/or that may affect our Lake Airfield, located nearby. Our staff can provide additional input and insights into what such an evaluation should consider. This area of Sussex County also includes many vernal wetland ponds that are important habitats for at-risk amphibians and reptiles.
4. The conservation of habitat for federal endangered RCWs, state threatened Bachman's Sparrows, SGCN northern bobwhites (quail), state endangered Rafinesque's eastern big-

Mr. Michael Poarch
June 15, 2023
Page 3

eared bats, federal endangered northern long-eared bats, SGCN southeastern fox squirrels, and other wildlife is a priority for DWR. We welcome the opportunity to collaborate with the County in the evaluation and identification of priority habitats and habitat restoration opportunities, in alignment with Virginia's Wildlife Action Plan and other habitat management and restoration plans.

As you may know, the Big Woods WMA was acquired and is now managed in part using Federal grant funds from the Service, requiring that those lands be used for their authorized purposes and remain under ownership and management control of the DWR. Any impacts on the Big Woods WMA, or our ability to properly manage it, or the ability for the public to access and use it that result from development and/or operation of the proposed solar energy and storage site must be considered in this context.

We also want to note that this project proposes conversion of a significant acreage of forested habitat to solar panels and related infrastructure, fragmenting currently intact forested habitats. Forest fragmentation results in loss of interior forested habitat, facilitates colonization by invasive species, and introduces new predator/prey relationships along the new forest edge and within adjacent habitats. We urge the applicant to consider these long-term impacts and to minimize them to the greatest extent possible. We recommend coordination with the DOF and DCR regarding an assessment of the forest fragmentation impacts and necessary mitigation to offset such impacts.

To best minimize impacts on wildlife and their habitats during construction and operation of solar facilities, we also recommend adherence to the attached Solar Energy Facility Construction and Operation Recommendations. In particular, we recommend that the fences enclosing solar arrays (pods) either be 61 inches or less in height, so that deer will have easy ingress and egress to/from the enclosure, or that the fences (including barbed wire if desired) be at least 96 inches in height, so that deer would not normally enter the site.

I look forward to working with Sussex County to ensure that, if this site is developed, wildlife and their habitats are appropriately protected and managed, impacts to the Big Woods WMA and control over it are avoided, and that the region remains available to eco-tourism and other outdoor recreation. Please do not hesitate to contact me at 804-389-3953 or Becky.Gwynn@dwr.virginia.gov if you have any questions or need more information.

Sincerely,



Rebecca K. Gwynn
Deputy Director

Town of Wakefield

Brian M. Laine, Mayor
Bonita Meyers, Clerk
Robyn L. Croft, Treasurer



Council Members
O. E. Parker, III, President
Frances Chambers
Michael W. Kessinger
Dennis P. Mason
Darlene Whiting
Brian K. Wills

Post Office Box 550
Wakefield, VA 23888
Telephone (757) 899-2361
Fax (757) 899-2907

RESOLUTION TO OPPOSE A CONDITIONAL USE PERMIT APPLICATION FOR BLACKWATER SOLAR

WHEREAS, the Wakefield Town Council has enacted a resolution to object the Conditional Use Permit application by Blackwater Solar which proposes to develop a hybrid 600MW Solar, 400MW energy storage generation facility. The project is located within the Wakefield area near the Southeast 4-H Educational Center.

WHEREAS, The Town of Wakefield opposes the short and long term damage and pollution to existing lands and waterways, outside of the corporate limits of the town, from the transportation and installation of the Blackwater Solar Farm through the emission of greenhouse gases, as well as the construction of the site will contain toxic and hazardous materials used during the manufacturing process photovoltaic cells of solar power which can indirectly affect the environment.

WHEREAS, The Town of Wakefield opposes the alternate land use of over 4000 acres which will be converted from agriculture, mixed forest, and pine plantations into a solar farm with only a 150-foot wood line boundary between the Blackwater Solar and existing homeowners. In addition, we oppose the alteration of existing roads to accommodate the required transportation network and access points to and from Blackwater Solar.

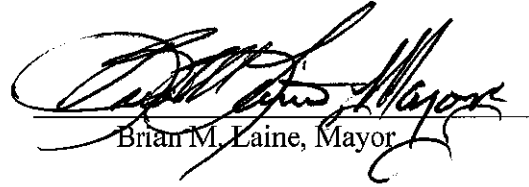
WHEREAS, The Town of Wakefield objects to the overall set up large-scale solar farms because they necessitate clearing and grading of vast land areas, leading to compression of soil, excessive soil erosion, and alteration of drainage channels.

WHEREAS, The Town of Wakefield objects to the habitat loss and strain on water resources from the development and long-term foot print of Blackwater Solar. In addition, we oppose the close proximity of Blackwater Solar to several managed lands, including the Big Woods and Airfield Pond which are located within a three-mile radius of the project

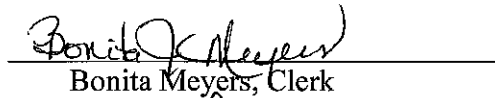
BE IT FURTHER RESOLVED That the Wakefield Town Council, Wakefield, Virginia requests the Sussex County Board of Supervisors reject the application due to the damage and reduction of forestry and agricultural usage, and the negative impact on the property value of any lands in proximity of acreage near the proposed installation of Blackwater Solar.

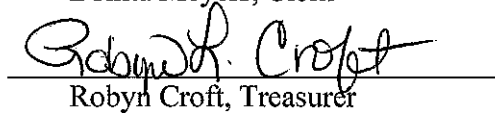
NOW, THEREFORE, BE IT AND IT IS HEREBY RESOLVED that the Wakefield Town Council, Wakefield, Virginia reiterates its opposition of the request for **Conditional Use Permit Application for Blackwater Solar in Sussex County.**

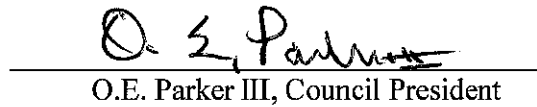
Adopted this 12th day of June, 2023.

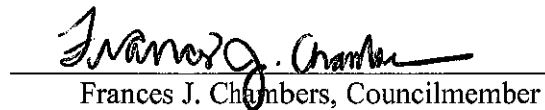

Brian M. Laine, Mayor

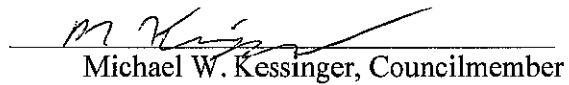
Attest:

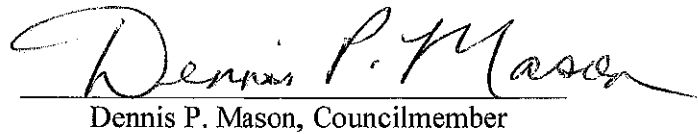

Bonita Meyers, Clerk

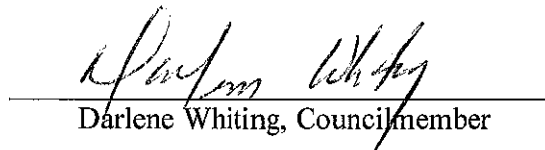

Robyn Croft, Treasurer


O.E. Parker III, Council President


Frances J. Chambers, Councilmember


Michael W. Kessinger, Councilmember


Dennis P. Mason, Councilmember


Darlene Whiting, Councilmember


Brian K. Wills, Councilmember

Beverly Walkup

From: Shilton Ricks Butts
Sent: Wednesday, March 20, 2024 11:28 AM
To: Richard Douglas
Cc: Beverly Walkup
Subject: FW: Stop Sussex Solar

Good morning Richard,

Please see the public comment received regarding Public Hearing item via the trailing email.

Thanks,

Mrs. Shilton R. Butts

Assistant to the County Administrator/
Clerk to the Board of Supervisors
Post Office Box 1397
20135 Princeton Road
Sussex, Virginia 23884
434 246 1002 Phone
434 246 6013 Fax
sricks@sussexcountyva.gov

From: traylor98@aol.com <traylor98@aol.com>
Sent: Tuesday, March 19, 2024 6:06 PM
To: Shilton Ricks Butts <sricks@sussexcountyva.gov>
Subject: Stop Sussex Solar

You don't often get email from traylor98@aol.com. [Learn why this is important](#)

CAUTION: This email originated from outside of the organization. Do not follow guidance, click links, or open attachments unless you know the content is safe.

We are highly opposed to the rezoning application and proposal for solar farms in Sussex County. They are an eyesore with little to no long-term benefit. Our county has been a farming community for many years and what is being proposed is not what I want our grandchildren to remember about our county.

Thomas and Susan Traylor
11714 Brittles Mill Road
Wakefield, VA 23888