DATE:	10/24/2023

TO:	William D. Fritz, AICP Development Process Manager **Albemarle County** 401 McIntire Road North Wing, Charlottesville, VA 22902

RE:	**Review of Solar Facility for Compliance with Comprehensive Plan** **0 Secretarys Sand Rd – Albemarle VA** Albemarle County, Virginia

Dear Mr. Fritz,

On behalf of Alberene Road Solar 1, LLC, New Leaf Energy, Inc. is requesting a review of our proposed solar facility for compliance with the County's Comprehensive Plan. The 4.5-Megawatt (MW) Solar System (Project) is sited entirely within Tax Parcel ID 12000-00-00-018A0 (120-18A) on the lands now or formerly of Alan or Cyndra Vanclief.

55 Technology Drive, Suite 102
Lowell, MA 01851
newleafenergy.com

Parcel Information: Parcel ID: 12000-00-00-018A0

The parcel consists of approximately 366 acres and is currently zoned RA – Rural Areas District. The parcel is located within Comprehensive Plan Rural Area 4 but does not have an assigned Comprehensive Land Use. The parcel is located within the Green Mountain Agricultural and Forestal District, Refer to Figure 1 right.

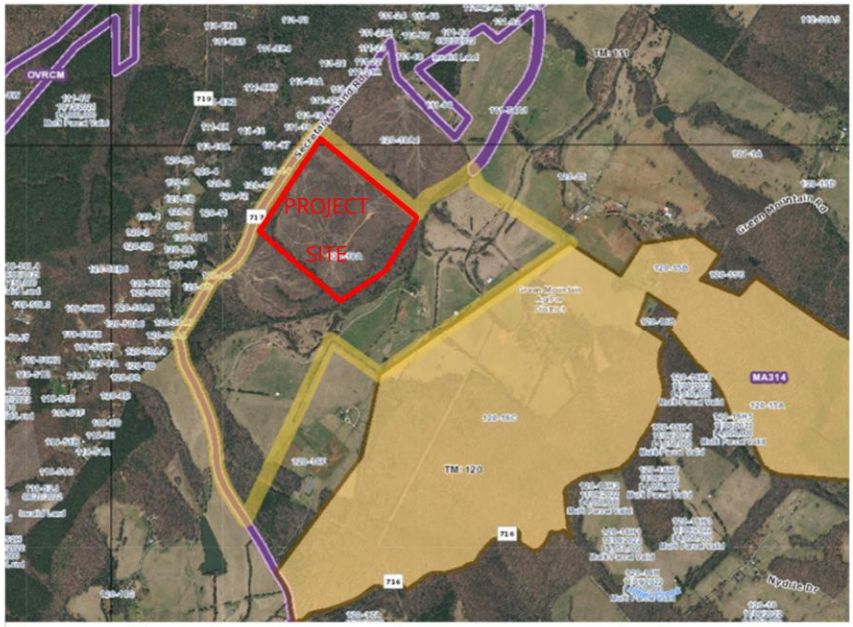


Figure 1- Albemarle County GIS Viewer – AgForest District Overlay

The parcel is situated within two watersheds, but the proposed project is entirely located within the South Fork Hardware River Watershed. Streams and wetlands were delineated onsite and will be avoided. The site will be designed to meet the County's Water Protection Ordinance Buffer requirements and other applicable County/State stormwater requirements. A preliminary consultation was conducted with various regulatory agencies and determined that, aside from the Northern Long Eared Bat and Tri-colored Bat, no state or federal species that are listed as Threatened or Endangered are located within the project's study area. The Project will follow proper tree clearing procedures to avoid potential impacts to the Northern Long Eared Bat and Tri-colored Bat. Additional coordination was performed with the Virginia Department of Conservation and Resources, which responded that the proposed project's location will not affect any documented state-listed plants or insects.

Proposed Project Information:

The project, a 4.5 MW Solar Facility, is located entirely on Tax Parcel 120-18A. The project is situated within the northwestern corner of the property, a previously timbered portion of the parcel. The project entrance is approximately 3,500 ft northeast of the intersection of Alberene Road and Secretarys Sand Road and utilizes a portion of an existing stabilized logging road. Please refer to the enclosed conceptual site plan depicting the project, parcel information and existing features, including environmental resources.

The project is considered a distributed generation project, in which the electricity generated will interconnect to the local distribution grid, commonly seen along the roads. The point of

interconnection is at the project's entrance along Secretarys Sand Road. Additionally, the general footprint of the facility will be situated approximately ±200 feet east of Secretarys Sand Rd. The project will primarily consist of solar panels, inverters, transformers, and other ancillary equipment. Livestock grazing is currently being pursued within the facility's fenced area as an added means to keep the site's agricultural character intact. The proposed project will not require its own substation and it does not facilitate any batteries for energy storage.

The project's anticipated area, including landscaping and undisturbed areas utilized for screening, is ±85 acres. The majority of the project area (±52 acres) will be used for vegetative screening (variable width from 140 to 369-foot buffer) and stormwater management controls, while ±33 acres will be used for the fenced facility. We anticipate approximately ±47 of the ±85 acres will be disturbed for the installation of the project to accommodate the facility and stormwater management controls. The entire disturbed area will be cleared of young timber that was planted after this portion of the property was clear cut approximately 10 years ago. Minor grading of the existing topography will occur for the installation of the stormwater controls and any drastic/irregular rills within the fenced area. The site will in general maintain its pre-construction topography and drainage patterns. The proposed access road will use a portion of the existing logging entrance; the remainder will be removed, stabilized and revegetated as part of the project's stabilization, utilizing native species to increase natural filtration, evapotranspiration, and reduction of the impervious surfaces within the project area.

The proposed facility will consist of a fenced perimeter containing ±33 acres. The fence will be designed in accordance with National Electric Code standards. The solar panels and ancillary equipment will be contained within the fenced area. The solar panel area is approximately 26 acres, including the inter-row spacing. The under-panel acreage is reduced to approximately 8 of the 26 acres, about 31 percent of the panel area. The electrical lines from the individual arrays will run beneath the panels to a collection point, then subsurface to the equipment pad, where it in general, will be combined and converted from DC to AC voltage. The electricity generated will then run along the proposed access road subsurface to the proposed poles near the point of interconnection where it will transition from subsurface to aerial and transition to the local utility provider. The aerial portion of the line, approximately 250-300 ft before the point on interconnect to the existing electric line, contains the necessary equipment for disconnecting, metering, and general change of control to the local electric utility provider. The utility poles will be erected adjacent to the access road and the final pole will tie-into the existing distribution electric line along Secretarys Sand Road, where the proposed access road intersects.

The project will utilize the mature forested areas between the project and Secretarys Sand to screen the site and maintain the rural/agricultural aspect of the area. Similar to the front of the project, the side and rear of the project will utilize the water resource protection areas and increased landscape buffer to screen the project from the adjacent properties. In addition, the project will stabilize the disturbed areas with native grasses and pollinator friendly plants. Portions of the recently cleared areas outside of the fence will serve as an early successional habitat that will be designed through the

use of limbs/saplings and treetops with a supplemental seed mix of native brush/shrub seeds to promote enhanced habitat for small game/ground birds further promoting local wildlife.

Comprehensive Plan Review and Conformance:

The proposed project is located on a 366-acre parcel that is currently enrolled within the Agricultural and Forest District and is located within the Comprehensive Plan's Rural Area. The County's plan for the Rural Area identifies eight objectives. Below are the objectives and our opinion of how the project is in substantial accord with the applicable objectives.

Objective 1: Support a strong Agricultural and Forestal economy.

The proposed project meets the intent of Objective 1 as the project will diversify agricultural activities by pursuing livestock grazing within the facility's fenced area. The areas outside of the fence will be reserved, similar to a conservation easement / County's Agricultural and Forestal District to maintain the mature vegetation while establishing additional native vegetation to ensure the rural character of the area remains intact. As part of establishing native vegetation and livestock grazing, the soil health will increase with decreased sediment laden runoff as a result from the previously forestal activities and incidental disturbance. The project will increase the resiliency of the local electric distribution line, improving the electrical demand required to establish the County's goal for expansion to the local equestrian industry and local distribution/support business. The project will lease this portion of the property for up to 40 years. After which the site will be decommissioned by removing the equipment, wiring and ancillary materials associated with the PV system. Any incidental disturbance will be stabilized and re-vegetated with native vegetation. Alternatively, the landowner may also resume forestal activities or pursue other agricultural activities.

Objective 2: Protect and preserve natural resources, which include mountains, hills, valleys, rivers, streams, groundwater, and continuous and unfragmented land for agriculture, forestry, biodiversity and natural resource protection.

The project is sited within a previously timbered portion of the property, which has been fragmented from the mature woods surrounding it. One of the benefits to the project is a long-term (20-40 years) conservation of property with minimal development / infrastructure through preserving the surrounding landscape, reverting the silviculture area into a meadow that can sustain livestock grazing, promoting improved soil health and native vegetation. The aforementioned benefits will naturally increase infiltration and groundwater recharge, evapotranspiration, and naturally filter runoff to the stream by preserving and enhancing the stream's riparian buffers, versus the current use of continual timbering of the site. The project will avoid impact to streams and wetlands by utilizing best management practices through best available technologies. Additionally, all implemented practices on site will meet the local and state erosion and sedimentation / stormwater programs by minimizing land disturbance and promoting native vegetation.

New Leaf worked with the third-party engineering company LaBella to conduct an Environmental Protected Resources Assessment for the project area to coordinate with the proper agencies and minimize any potential impact to threatened or endangered species on-site.

Objective 3: Protect the County's historic, archeological, and cultural resources.

The project area was evaluated for a cultural resource assessment. The evaluation included an initial walkthrough of the site and review of the Virginia Department of Historic Resources (DHR) Virginia Cultural Resource Information System (VCRIS). In general, no architectural structures are located within the project site. While our third-party consultant determined that there is potential for pre-contact and historic period sites, there is a low likelihood that the sites will remain intact due to recent logging and incidental disturbance over the years of silvicultural practices. In a good faith effort, an architectural and archeological study will be conducted as part of the permitting process, which will include a study of architectural structures within a 0.5 mile of the proposed project area. This additional historical research and documentation will provide additional information to the County's Historic Preservation Committee.

Objective 4: Promote rural and historic landscapes that enhance visitors' experience and give historic sites as authentic a setting as possible.

The project is situated approximately 200 feet back through mature woods along the public road and will utilize an existing logging road entrance. The proposed project is designed to utilize the existing vegetation to adequately screen the site and preserve the authentic setting for visitors and neighbors alike. Additionally, low growth / canopy vegetative seed mix will be utilized to supplement the existing buffer for additional dense low to mid growth screening. During operation of the facility, traffic will be minimal, similar to that of a single-family residence or less. Through proper siting and screening, the project is unlikely to impact the visitors' experience and maintains an authentic setting of the historic site.

Objective 5: Recognize and support crossroads communities, which serve as rural-scale community meeting places and provide opportunities for residents to take part in community life.

As previously discussed, the project will improve the local electrical grid's resiliency through upgrades to the existing line and the existing substation equipment as required. These upgrades will allow for local residents to upgrade their electrical needs, including the potential for small stores or similar communities' base amenities at local crossroad communities.

Objective 6: Provide distinct boundaries between the Rural Area and Development Areas.

The project can meet or exceed the rural design standards and does not require extensive development for parking lots, signage, entrance requirements. The project utilizes natural vegetation to appropriately screen the site and does not require significant infrastructure to operate. The facility

primarily operates remotely with bi-weekly to monthly site inspections and does not create a strain to the local roads.

Objective 7: Provide information to citizens so they are well-informed and understand the cultural, economic, and ecological aspects of the Rural Area.

The project does not propose traditional development, seeking to be kept out of the rural area. Instead, the solar project proposes long term preservation of the land through a lease. Upon the project's end of life/lease expiration, the site will be decommissioned and returned to the owner for their use, which may revert to silviculture, continued livestock grazing or agriculture. Since the facility is monitored remotely and there is no human habitation within the project facility, the biodiversity will slightly change as to the type of wildlife within the project's fenced area, but more so will remain unchanged.

Objective 8: Retain the character of Rural Area land located in Area B.

The project and parcel is not located within Area B.

Agricultural and Forestal District:

Chapter 3 Section 3-100 Purpose for Agricultural and Forestal Districts is to provide a means by which agricultural and forestal lands of statewide and local significance may be protected and enhanced as a viable segment of the State and local economies, and as important economic and environmental resources. The State and County Policies to be promoted include the following:

A. *Production of food and other agricultural and forestal products*.
B. *Provide essential open spaces*.
C. *Strong agricultural and forestal economy*.
D. *Protect and preserve natural resources and retain continuous and unfragmented land*.

The proposed project is situated on a 366-acre parcel that is located within the Green Mountain Agricultural and Forestal District. We are proposing to utilize a proportion of the previously timbered (fragmented) portion of the parcel for the installation of a small distributed generation solar facility. The solar facility is a passive system that harvests the sun's energy and converts it to electricity to serve the local grid. While this requires electrical equipment, the conversion of the sun's energy is similar in nature to photosynthesis for growing crops. The solar facility also provides additional benefits as a multi-use for livestock grazing within the fenced area for livestock to maintain the native grasses and fertilize the land. The project's associated stormwater controls serve as interim filtration/barrier to reduce the pollutant loading often affiliated with grazing that may overtime lead to high bacteria levels in local streams/waterways.

Chapter 3 Section 3-202 – Effect of creating a district.

Any lands within a district are subject to the following. Prohibition to develop to a more intensive use. As a condition to creating a district, any parcel within the district shall not be developed to a more intensive use than that existing on the date the district was created, subject to the following:

3 Non-residential uses and other actions deemed not to be development to a more intensive use. The following non-residential uses and other actions are deemed not to be developed to a more intensive use:

k. Special uses and structures allowed in the Rural Areas zoning district. Any proposed use or structure allowed by special use permit in the Rural Areas zoning district, provided that the Board of Supervisors determines that the use or structure allowed by the special use permit is consistent with the purposes of this chapter.

Section 10.2.2 lists Solar Energy Systems as a special use permit within the Rural Areas District. The Purpose listed in Section 3-100 is very similar to the County's objectives for the Rural Areas District within the Comprehensive Plan. Our proposed project will harvest the sun's energy, similar to traditional crops, to generate electricity to feed the local electrical grid, improve the resiliency of the local grid, improve/upgrade the local electrical grid, benefiting all local residents along the circuit. The proposed facility's fenced area would include livestock grazing as a natural way to maintain the project and further promote agricultural diversity for the landowner. The project's screening/landscaping utilizes the existing mature woods and riparian areas, which will preserve these areas similar to the District's intent to prevent further degradation and enhance the buffers to promote natural filtration, increased soil health and ground water recharge.

In summary, our proposed small scale distributed generation project diversifies the landowners agricultural activities, preserves the land without further fragmentation, provides essential open spaces to promote wildlife and create additional habitat through the landscape/screening, and protects the natural resources surrounding the site through the use of best available technologies to use native grasses to improve filtration of stormwater runoff, increase infiltration, increase ground water recharge, and maintain the natural drainage patterns of the lands, while preserving the riparian areas from development.

Thank you for considering our application. We look forward to meeting with everyone and please do not hesitate to contact me at (757) 377-2405 or via email at qwood@newleafenergy.com .

Sincerely,

New Leaf Energy
Quentin J. Wood, P.E.
Civil Project Engineer II