

ALBEMARLE COUNTY PLANNING STAFF REPORT SUMMARY

Project Name: SP202100001 Midway Solar	Staff: William D. Fritz, AICP
Planning Commission Public Hearing: April 20, 2021	Board of Supervisors Hearing: June 16, 2021
Owner(s): Central Virginia Electric Cooperative	Applicant(s): Sun Tribe Development
Acreage: 136 acres	By-right use : RA, Rural Areas - agricultural, forestal, and fishery uses; residential density (0.5 unit/acre in development lots)
TMP : 08500-00-00-017B0	Special Use Permit for: Solar Energy System
Location: The proposed project is located on the west side of Craigs Store Road (Route 635) approximately 1 1/2 miles south of Batesville.	
Magisterial District: Samuel Miller	Proffers/Conditions: Yes
School District: Brownsville, Henley, Western Albemarle	DA - RA - X
Requested # of Dwelling Units/Lots: NA	Comp. Plan Designation: Rural Area – preserve and protect agricultural, forestal, open space, and natural, historic and scenic resources; residential (0.5 unit/ acre in development lots)
Proposal: Solar-energy electrical generation facility including an approximately 8 megawatt photovoltaic system and 4 megawatt battery energy storage system occupying approximately 80 acres.	Use of Surrounding Properties: The surrounding area is primarily wooded with some pasture and dwellings. The properties immediately to the south are developed with dwellings and are largely open. Adjacent property to the north, northwest and south are in the Batesville Agricultural Forestal District.
Character of Property: The property is a mixture of forms the northern/western border. A high voltage particular	
 Factors Favorable: 1. Provides a source of renewable power generation. 2. In compliance with the Comprehensive Plan 3. Site can be returned to by-right use. 	 Factors Unfavorable: 1. Proposes a large impervious area within the watershed of the South Fork Rivanna Reservoir. 2. Will have some visual impacts for a number of years until screening trees grow.

Recommendation: Staff recommends approval of SP202100001 Midway Solar with conditions.

STAFF CONTACT: PLANNING COMMISSION: BOARD OF SUPERVISORS:

William D. Fritz, AICP April 20, 2021 June 16, 2021

PETITION:

PROJECT: SP202100001 Midway Solar MAGISTERIAL DISTRICT: Samuel Miller TAX MAP/PARCEL: 08500-00-00-017B0

LOCATION: The proposed project is located on the west side of Craigs Store Road (Route 635) approximately 1 1/2 miles south of Batesville.

PROPOSAL: Solar-energy electrical generation facility including an approximately 8 megawatt photovoltaic system and 4 megawatt battery energy storage system occupying approximately 80 acres.

PETITION: Solar energy system allowed by special use permit under section 10.2.2.58 of the Zoning Ordinance on a 136-acre parcel. No new dwelling units proposed.

OVERLAY DISTRICT: Flood Hazard Overlay District

PROFFERS: None

COMPREHENSIVE PLAN: Rural Area – preserve and protect agricultural, forestal, open space, and natural, historic and scenic resources; residential (0.5 unit/ acre in development lots)

CHARACTER OF THE AREA:

The surrounding area is primarily wooded with some pasture and dwellings. The properties immediately to the south are developed with dwellings and are largely open. Adjacent property to the north, northwest and south are in the Batesville Agricultural Forestal District. The Batesville Historic District is located approximately 0.5 miles to the northeast. Attachment A contains mapping of the area.

PLANNING AND ZONING HISTORY:

No Planning and Zoning history is available. This parcel was previously in the Batesville Agricultural District but was removed from the district at the request of the property owner on December 16, 2020.

DETAILS OF THE PROPOSAL:

The applicant has proposed a solar-energy electrical generation facility including an approximately 8 megawatt photovoltaic system and 4 megawatt battery energy storage system occupying approximately 80 acres. Attachment B contains the narrative submitted by the applicant. Attachment C is a concept plan of the proposed project. All of the information submitted by the applicant is available in the CountyView system that may be accessed on the County's website or by clicking <u>HERE</u>.

COMMUNITY MEETING:

A virtual community meeting was held on February 23, 2021. There were a total of 37 attendees. Comments received included: concerns about lighting, statements in support of grazing opportunities on the site, providing public trail access along the Mechums River, visual impacts, property value impacts, decommissioning and recycling of decommissioned materials and construction access. A recording of the community meeting may be found on the County Calendar for February 23, 2021 or by clicking <u>HERE</u>.

ANALYSIS OF THE SPECIAL USE PERMIT REQUEST

This special use permit, and all special use permits, are evaluated for compliance with the provisions of Chapter 18, Section 33.40b of the Code of Albemarle. Each provision of that section is addressed below. The provisions of the ordinance are in bold font and underlined.

The comments below are based on staff's analysis of the application including information submitted by the applicant. The information submitted by the applicant contains detailed information. Staff will not restate all of the submitted information in this staff report and refers the reader to attachments for detailed information.

<u>No substantial detriment.</u> The proposed special use will not be a substantial detriment to adjacent lots.

Impacts on adjacent lots will be limited to visual and noise impacts. Noise generated by the site is minimal and is less than what could be generated from by-right agricultural uses of the property. The sound generated by the equipment on site is similar to what would be generated by heating and cooling equipment associated with a home. Staff is recommending a minimum setback of 100 feet for all equipment to mitigate sound and visual impacts. The recommended setback is greater than what is permitted for residential development or agricultural activity.

The site will be somewhat visible from adjacent properties particularly in the early years of the development. Visibility will be largely eliminated from adjacent property as the screening trees grow. While visibility is an impact and may change the character of the area, staff does not consider visibility to result in a substantial detriment as it does not prevent the use of any adjacent property for any by-right uses.

<u>Character of the nearby area is unchanged.</u> Whether the character of the adjacent parcels and the nearby area will be changed by the proposed special use.

Solar facilities must be located on relatively large, open, gently sloping areas with access to power transmission lines. The Rural Areas of the Comprehensive Plan are the only areas where utility scale solar is permitted. Utility scale solar is permitted in the RA, Rural Area zoning district. This district is the predominant district in the part of the County designated Rural Areas in the Comprehensive Plan. Minor areas of RA zoning may be found in the Development Areas. However, the size of these parcels and their designation as a Development Area makes use of these parcels for utility scale solar unlikely.

The use of adjacent properties for forestry and agriculture is not impacted by the proposed solar facility. Property adjacent to the proposed solar facility is located in the Batesville Agricultural Forestal District. This project was reviewed by the Agricultural Forestal Advisory Committee on March 16, 2021. By a vote of 6:1 the committee found that the proposal does not conflict with the purposes of the districts. A recording of the committee meeting may be found on the County Calendar for March 16, 2021 or by clicking <u>HERE</u>.

The primary commercial use intended for the Rural Areas is the production of forestal and agricultural commodities. While this utility use is not identified as a policy priority for the Rural Areas, it helps the County to meet other Comprehensive Plan goals related to renewable-energy production. The decommissioning plan ensures that the site can return to appropriate agricultural or forestry uses when the solar-generation uses ends. Staff opinion is that utility scale solar does not, as a use type, change the character of the area.

Solar facilities do represent a change in the character of the area due to the industrial appearance of the facility. As stated previously, the site will be visible from adjoining property. This visibility will be diminished significantly as screening trees grow. It is not practical to plant trees at a height that provide instant screening.

The applicant has submitted an analysis of the impact of solar facilities on the impact on adjoining property value. This study was prepared by Kirkland Appraisals, LLC. The full 128 page document is available in the CountyView system that may be accessed on the County's website or by clicking HERE

The conclusion of this analysis is:

"The matched pair analysis shows no impact in home values due to abutting or adjoining a solar farm as well as no impact to abutting or adjacent vacant residential or agricultural land with visual barriers and distances similar to what is proposed at the subject property. I have considered matched pairs of sales of homes adjoining solar farms in Virginia as well as other states for supplemental data in this analysis.

Very similar solar farms in very similar areas have been found by hundreds of towns and counties not to have a substantial injury to abutting or adjoining properties, and many of those findings of no impact have been upheld by appellate courts. Similar solar farms have been approved adjoining agricultural uses, schools, churches, and residential developments.

Based on the data and analysis in this report, it is my professional opinion that the solar farm proposed at the subject property will have no impact on the value of adjoining or abutting property.

I note that larger solar farms using fixed or tracking panels ara a passive use of the land that is in keeping with a rural/residential area. Solar farms are comparable to larger greenhouses. This is not surprising given that a greenhouse is essentially another method for collecting passive solar energy. The greenhouse use is well received in residential/rural areas and has a similar visual impact as a solar farm."

Staff opinion is that, in the short term, the character of the area will be minimally changed due to the industrial character of the solar facility. However, as screening trees mature this impact will be mitigated and ultimately the character of the area will be restored when the project is decommissioned.

Harmony. Whether the proposed special use will be in harmony with the purpose and intent of this chapter,

Staff has reviewed the purposes of the Zoning Ordinance (Chapter 18, Section 1.4) and the intent of the Rural Area District (Chapter 18, Section 10.1). The review criteria for a special use permit is designed to address the purpose and intent of the ordinance as stated in these sections. However, several sections warrant additional discussion.

Section 1.4G states "Encourage economic development activities that provide desirable employment and enlarge the tax base". The proposed solar facility generates limited employment mostly associated with the construction of the facility. The applicant has submitted information indicating that the solar facility will enlarge the tax base of the County stating in part:

"Accounting for the additional Personal Property Tax revenue associated with the construction of this project, Albemarle County could be expected to receive over \$23,000 in year 1 of the project operation, and more than \$960,000 over the life of the facility. In comparison to the current tax base for this parcel, which would be expected to result in in approximately \$20,000 over the next 25 years."

Section 10.1 states in part:

"This district (hereafter referred to as RA) is hereby created and may hereafter be established by amendment of the zoning map for the following purposes:

- Preservation of agricultural and forestal lands and activities;
- Water supply protection;
- Limited service delivery to the rural areas; and
- Conservation of natural, scenic, and historic resources.

Based on the USDA Soil Survey of Albemarle County approximately 33% of the site is prime soil. These soils are somewhat scattered throughout the site and no unique soils are located on the property. The decommissioning plan will allow the property to be used for agricultural/forestal uses in the future.

Discussion of the projects potential impact on water supply protection is contained in the section addressing consistency with the comprehensive plan.

The intent of the RA district, Section 10.1, also states in part "Residential development not related to bona fide agricultural/forestal use shall be encouraged to locate in the urban area, communities and villages as designated in the comprehensive plan where services and utilities are available and where such development will not conflict with the agricultural/forestal or other rural objective." While this project is not a residential development staff does note that utility scale solar facilities are most appropriately located where power distribution infrastructure exist. This property is crossed by high voltage transmission lines and no improvements to the distribution infrastructure is proposed or anticipated.

The evaluation of this request for compliance with the purpose and intent of the ordinance results in mixed findings. This project will be generally consistent with the purpose and intent. However, staff cannot make a finding that even a temporary installation (25 years or more) of a large impervious area in the water supply watershed is consistent with the intent of the RA district.

Harmony. ...with the uses permitted by right in the district

The proposed facility will not prevent any by-right uses on surrounding properties.

Harmony. ...with the regulations provided in section 5 as applicable,

This use is not subject to any regulations contained in section 5.

Harmony. ...and with the public health, safety and general welfare.

The Fire/Rescue Department has reviewed this request. Public health and safety are addressed during the site plan review process. The site plan process includes reviewing the project entrance, stormwater runoff, erosion control and other features of the project. The Fire/Rescue division has requested, and the applicant has agreed to, a training program to address the unique characteristics of a utility scale solar facility.

The Virginia Department of Transportation has reviewed this request. As part of the site plan process the entrance design will be addressed. The public, Virginia Department of Transportation and staff have expressed concern about access to the property during construction. A condition is proposed

that will limit large vehicle construction traffic. This condition will prevent large vehicle construction traffic from accessing the site from Batesville. This is appropriate due to bridge restrictions at Batesville and the size and alignment of roads accessing the property from the direction of Batesville. Access to the site must come from the west.

The general welfare impact on the water supply watershed is addressed below.

Staff has considered the content of the Climate Action Plan when evaluating this projects harmony with the general welfare. Attachment D contains some of the portions considered when evaluating this application. The Climate Action Plan supports the use of utility scale solar.

Staff is able to find that with conditions, this project will be in harmony with the public health, safety and general welfare.

<u>Consistency with the Comprehensive Plan.</u> The use will be consistent with the Comprehensive Plan.

The applicant's application narrative contains discussion about consistency with the Comprehensive Plan (Attachment B).

In addition to the comments provided by the applicant staff provides the following additional comments.

Background (Page 1.6)

Promote the conservation and efficient use of energy resources

This project would provide for efficient production and use of energy.

Growth Management (Page 3.4) the Comprehensive Plan states:

The principle of watershed planning is a key part of growth management planning. Protection of the public water supply, which relies on impoundments fed by these watersheds, is essential to the County's growth. Except for the Community of Crozet and a very small area in the Places29 Development Area, the western edge of the Development Areas boundaries is based on the watershed for the public water supply.

Natural Resources (Page 4.5) the Comprehensive Plan states:

History of Watershed Protection in Albemarle County The County's water resources programs include stormwater management (including water quality treatment, and channel and flood protection), erosion and sediment control, stream buffer protection, collection of groundwater information, capital projects, public education, illicit discharge detection and elimination, and infrastructure maintenance. These activities are a result of comprehensive planning and regulations to protect water resources since the 1970s. In 1980, most land in water-supply watersheds was designated rural in order to prevent and reduce pollution and development potential in the Rural Area was restricted.

This property is located within the watershed of the South Fork Rivanna Reservoir. The RA district is the predominate zoning within the watershed of the South Fork Rivanna Reservoir in recognition of the RA district's limited impact on the watershed as compared to more intensive zoning. The Crozet area is an exception to the use of RA zoning as a technique

to preserve the quality and quantity of water resources. However, the Crozet area has received significant public investment to minimize the impact on water resources. These include provision of public water and sewer, stormwater systems including the construction of the Lickinghole Basin. The proposed solar facility involves the installation of a large area of solar panels. Approximately 80 acres of the site will be used for the solar facility. However, not all of this area will be covered by panels. The exact area of panel coverage will be required at the time of site plan review to verify that water control measures to address the quantity and quality of the runoff from these panels are addressed as required by the ordinance.

The solar panels themselves are impervious, however the area under the panels remains pervious. This arraignment will likely result in less runoff than would be expected from fully impervious development. However, runoff will be greater than the existing condition of the site due to the concentration of runoff caused by the panels.

However, unlike other projects with impervious areas this project may ultimately be decommissioned and returned to the previous condition. Unlike impervious areas involving streets and parking, the impervious area from the solar panels does not collect oil, grease, rubber or other pollutants that ultimately runoff. Cleaning of the panels is done by rainfall, or if rainfall is insufficient it is accomplished by water (brought in by truck) and brush. Chemicals are not used in the cleaning of dust, pollen or bird droppings from the panels.

A large impervious area in the reservoir watershed would be inconsistent with the comprehensive plan. However, staff opinion is that the impervious nature of the proposed facility is mitigated:

- Grass under the panels maintains pervious area.
- The use of tracking systems for the panels. This alters the angle of the dripline of the panels and helps to prevent concentrated flow.
- The rows of panels are separated to prevent shading and allow access. This separation allows for pervious areas throughout the site. This aids in runoff absorption.
- The impervious nature of these panels is less than that from greenhouses or other agricultural buildings.
- Decommissioning will return the property to its current pervious state.

The introduction of impervious area not associated with agricultural or forestal activity may be considered inconsistent with the Comprehensive Plan. In this application staff finds that this proposal does not adversely impact the reservoir watershed for the reasons stated above.

Natural Resources (Page 4.45) the Comprehensive Plan states:

In 2010, members of the community and representatives of the County, the City, and UVA began a local planning process to find ways to lower the community's energy consumption and, thus, greenhouse gas emissions. The Committee, known as the Local Climate Action Planning Process (LCAPP) Steering Committee, recommended that the City, County, and UVA:

• Continue to demonstrate leadership in energy and carbon reductions at the local level;

• Build on existing synergies by continued collaboration of City, County, UVA, and

community partners;

- Integrate the role of energy and carbon emissions in projects and planning;
- Equip the community at all levels to make informed decisions about the impacts of carbon emissions and energy; and
- Identify and promote actions that enable the community to reap the health, economic and environmental benefits that accompany sound energy-based decisions.

Utility scale solar satisfies these objectives.

Review for Compliance with the Comprehensive Plan

As a solar facility, this proposal is subject to a Compliance with the Comprehensive Plan Review as required by the Code of Virginia (§15.2-2232). A compliance review considers whether the general location, character, and extent of a proposed public facility are in substantial accord with the adopted Comprehensive Plan. It is reviewed by the Planning Commission, and the Commission's findings are forwarded to the Board of Supervisors for their information. No additional action is required of the Board.

For the reasons discussed above staff finds that this proposal is consistent with the Comprehensive Plan.

SUMMARY:

This project has been reviewed for compliance with the factors to be considered in acting on a special use permit. Staff has also reviewed the ordinances and requirements of other Virginia localities to determine best practices for utility scale solar projects. It is the opinion of staff that this project, with conditions, is consistent with the ordinance requirements for approval of a special use permit and is consistent with best practices principles. In the opinion of staff, this project will have limited impact. The impact caused by this project are primarily associated with construction and visual impact. The construction impact is of limited duration. The visual impacts will change the character of the area for some period of time. As the screening trees mature this impact will be mitigated and largely eliminated. This project is unusual in that it is a use that can be removed, allowing the site to largely return to its existing condition.

Factors favorable to this request include:

- 1. Provides a source of renewable power generation.
- 2. In compliance with the Comprehensive Plan
- 3. Site can be returned to by-right use.

Factors unfavorable to this request include:

- 1. Proposes a large impervious area within the watershed of the South Fork Rivanna Reservoir.
- 2. Will have some visual impacts for a number of years until screening trees grow.

RECOMMENDED ACTION:

Based on the findings contained in this staff report, and with the conditions proposed below staff recommends approval

Motions:

Special Use Permit

A. Should the Planning Commission choose to recommend approval of this special use permit:

I move to recommend approval of SP202100001 Midway Solar with the conditions outlined in the staff report.

B. Should the Planning Commission choose to recommend denial of this special use permit:

I move to recommend denial of SP202100001 Midway Solar. Should a commissioner motion to recommend denial, he or she should state the reason(s) for recommending denial.

Recommended Conditions of Approval:

- Development and use shall be in general accord with the plans prepared by Hewitt Solutions, PLLC titled "Central Virginia Electric Cooperative Midway Solar Project" dated December 17, 2020 (hereinafter "Concept Plan") and included as Attachment C, as determined by the Director of Planning and the Zoning Administrator. To be in general accord with the Concept Plan, development and use shall reflect the following major elements as shown on the Concept Plan:
 - a) Location of solar development envelopes,
 - b) Location of equipment yard, and
 - c) Retention of wooded vegetation in stream buffers

Land disturbance, which includes but is not limited to grading, excavation, filling of land, the felling of trees, and the removal of tree stumps, shall be limited to the areas within the proposed fence area as shown on the Concept Plan. The location of the proposed entrance and access to the solar facility shall not be subject to this condition.

Minor modifications, with the approval of the Zoning Administrator and the Director of Planning, to the Concept Plan that do not otherwise conflict with the elements listed above may be made to ensure compliance with the Zoning Ordinance, and State or Federal laws.

- 2. Landscaping and screening shall be substantially the same as shown on the plans prepared by Hewitt Solutions, PLLC titled "Central Virginia Electric Cooperative Midway Solar Project" dated December 17, 2020 (hereinafter "Concept Plan") and included as Attachment C, as determined by the Director of Planning and the Zoning Administrator.
- 3. All inverters and solar panels shall be set back at least one hundred (100) feet from property lines and rights-of-way.
- 4. The applicant shall submit a decommissioning and site rehabilitation plan (hereinafter "Decommissioning Plan") with the building permit application that shall include the following items:
 - a. A description of any (e.g. lease) with the landowners regarding decommissioning;
 - b. The identification of the party currently responsible for decommissioning;
 - c. The types of panels and material specifications being utilized at the site;
 - d. Standard procedures for removal of facilities and site rehabilitation, including recompacting and reseeding;

- e. An estimate of all costs for the removal and disposal of solar panels, structures, cabling, electrical components, roads, fencing, and any other associated facilities above ground or up to thirty-six (36) inches below grade or down to bedrock, whichever is less; and
- f. An estimate of all costs associated with rehabilitation of the site.
- g. Provisions to recycle materials to the maximum extent possible.

The Decommissioning Plan shall be prepared by a third-party engineer and must be signed off by the party responsible for decommissioning, and all landowners of the property included in the project. The Decommissioning Plan shall be subject to review and approval by the County Attorney and County Engineer and shall be in a form and style so that it may be recorded in the office of the Circuit Court of the County of Albemarle.

- 7. Prior to issuance of a grading permit, the Decommissioning Plan shall be recorded by the applicant in the office of the Circuit Court of the County of Albemarle.
- 8. The Decommissioning Plan and estimated costs shall be updated every five years, upon change of ownership of either the property or the project's owner, or upon written request from the Zoning Administrator. Any changes or updates to the Decommissioning Plan shall be recorded in the office of the Circuit Court of the County of Albemarle.
- 9. The Zoning Administrator shall be notified in writing within 30 days of the abandonment or discontinuance of the use,
- 10. All physical improvements, materials, and equipment (including fencing) related to solar energy generation, both above ground and underground, shall be removed entirely, and the site shall be rehabilitated as described in the Decommissioning Plan, within 180 days of the abandonment or discontinuance of the use. In the event that a piece of an underground component breaks off or is otherwise unrecoverable from the surface, that piece shall be excavated to a depth of at least 36 inches below the ground surface.
- 11. If the use, structure, or activity for which this special use permit is issued is not commenced by DATE 3 YEARS AFTER APPROVAL BY THE BOARD OF SUPERVISORS, the permit shall be deemed abandoned and the authority granted thereunder shall thereupon terminate.
- 12. The facility shall be meet the requirements contained in Chapter 18, Section 4.14 of the County Code.
- 13. Products used to clean panels are limited to water, and biodegradable cleaning products.
- 14. No above ground wires except for those associated with the panels and attached to the panel support structure and those associated with tying into the existing overhead transmission wires.
- 15. Prior to activation of the site the applicant shall provide training Fire/Rescue. This training shall include documentation of onsite materials and equipment, proper firefighting and life saving procedures and material handling procedures.
- 16. The property owner shall grant the Zoning Administrator, or designee, access to the facility for inspection purposes within 30 days of the Zoning Administrator requesting access.

- 17. Outdoor lighting for the facility shall be permitted only during maintenance periods; regardless of the lumens emitted, each outdoor luminaire shall be fully shielded as required by section 4.17; provided that these restrictions shall not apply to any outdoor lighting required by state or federal law.
- 18. Plantings for screening shall be include a minimum of three species type taken from the Albemarle County Recommended Plants List or as may be approved by the Agent. Species shall be dispersed throughout the site.
- 19. Construction/truck traffic shall access this property from the west and not from Batesville. This limitation does not apply to passenger vehicles and pickup type vehicles.

ATTACHMENTS

- Attachment A Map
- Attachment B Applicant Narrative
- Attachment C Concept Plan (Central Virginia Electric Cooperative Midway Solar Project)
- Attachment D Portions of the Climate Action Plan
- Attachment E Public Comment