

WOLF HILLS SOLAR WASHINGTON COUNTY, VIRGINIA

SPECIAL EXCEPTION PERMIT APPLICATION NARRATIVE AND EXHIBITS

MAY 31, 2024

Applicant: Engineering:

CAT REEDY SOLAR, LLC

2501 N. Harwood Street Suite 2550 Dallas, TX 75201 1001 Boulders Parkway

Suite 300 Richmond, VA 23225 WILLIAMS MULLEN

Legal:

323 2nd Street, SE Suite 900 Charlottesville, VA 22902

TABLE OF CONTENTS

INTRODUCTION1-	
APPLICANT INFORMATION1 -	
PROJECT PROPOSAL - 1 -	
SOLAR ORDINANCE 2 -	
DEFINITIONS 2 -	
PROJECT COMPLIANCE WITH SOLAR ORDINANCE 3 -	
ECONOMIC IMPACT 12 -	
EXHIBITS: 17 -	
A.	Catalyst Energy Corporate Information
В.	Project Tax Map Parcels17 -
C.	Conceptual Plan
D.	Environmental Resource Impact Analysis
E.	Decommissioning Plan
F.	Visual Renderings
G.	Agrivoltaic Solutions Agricultural Integration Plan
Н.	Mangum Economics Report
I.	Kirkland Appraisals Property Values Impact Analysis
J.	Traffic & Route Evaluation Study



INTRODUCTION

Cat Reedy Solar, LLC (the "Applicant") is a wholly owned subsidiary of Catalyst Energy Partners, LLC ("Catalyst Energy"), both Delaware limited liability companies. The Applicant seeks to develop a large-scale solar energy facility known as Wolf Hills Solar in Washington County, Virginia. Timmons Group, based in Richmond, Virginia, is the engineering consultant for the Applicant.

Wolf Hills Solar is a proposed up to 262 MWac ground-mounted photovoltaic (PV) solar energy system to be constructed on approximately 2,253 acres of land to be leased or purchased by the Applicant. The solar energy system and its associated facilities such as gravel access roads, perimeter fence, electrical equipment, stormwater management features, and landscaping are referred to herein as the "Project."

In accordance with Division 2, Section 66-1240 through 66-1270 of Chapter 66, Article XIV of the Washington County Zoning Ordinance (the "Zoning Ordinance"), the Applicant is pleased to seek Special Exception Permit approval for the proposed Large Scale Solar Energy Project from Washington County. Additionally, in accordance with §15.2-2232 of the Virginia State Code, the Applicant kindly requests a review of the Project for substantial compliance with Washington County's Comprehensive Plan (the "Comprehensive Plan")¹.

APPLICANT INFORMATION

The Applicant's parent company, Catalyst Energy Partners, LLC, plays a pivotal role in America's clean energy transition by accelerating the delivery of utility scale renewable energy generation. Backed by a world-class group of strategic and financial investors, Catalyst's unique renewable energy strategy is to acquire, invest in, and develop North American thermal electric powerplants and associated transmission infrastructure and add renewable energy generation and energy storage to meet the needs of a rapidly growing national market for renewable power. Catalyst will be leasing or purchasing the parcels around the Wolf Hills Energy gas plant (operated by Middle River Power) for the Solar Facility and will use the gas plant's existing interconnection to the electric grid. Catalyst's management team has a proven track record of successful renewable energy projects. Please refer to Exhibit A for Catalyst Energy's corporate background.

PROJECT PROPOSAL

Wolf Hills Solar is a proposed Solar Energy Facility located on 33 parcels in the Wilson, Taylor, and Jefferson Magisterial Districts of central Washington County northwest of I-81 and U.S. Route 11 on either side of the Norfolk Southern Railroad, abutting the Wolf Hills Energy gas-fired power station on Industrial Park Road. Please see <u>Exhibit B</u> for a list of the Tax Map parcel numbers, addresses, property owners, and zoning district designations for the 33 Project parcels (the "Property"). (This information is also included on Sheet C2.6 of the Plans.) Currently, the Applicant expects to lease or purchase 2,253 acres from local landowners for the Project. These subject parcels are primarily zoned Agricultural, Limited (A-1) and Agricultural General (A-2).

¹ Such review will not be necessary if the County approves the siting agreement as discussed later in the narrative.



Three parcels are zoned Residential, General (R-2), five parcels are zoned Industrial, General (M-2), and 8 parcels are split-zoned among these various districts, as indicated on <u>Exhibit B</u>.

Per Section 66-1243(c) of the Zoning Ordinance, large scale solar projects are allowed in all zoning districts by special exception permit. Large scale solar projects are permitted by right in the M-1 and M-2 districts, so the requested special exception is not required for, and does not pertain to, the five parcels located solely in the M-2 district. However, the M-2 zoned parcels are shown on the Concept Plan for clarity and since they will be included in the site plan for the Project.

Per Sections 66-297(a)(13)(a), 66-(a)322(15)(a), 66-522(a)(7)(a) of the Zoning Ordinance, the following utilities and public services are permitted in the A-1, A-2, M-2 Districts, respectively, by right without any permit: "poles, overhead and underground lines, distribution transformers, meters, street lighting and related appurtenances necessary for the transmission and distribution of electric and telecommunication services, electrical power substations, electrical power transmission towers, telecommunication switching facilities and telecommunication towers and antennas." In the R-2 District, Section 66-422(a)(9)(a) provides that "(p)oles, overhead and underground lines, distribution transformers, meters, street lighting and related appurtenances necessary for the transmission and distribution of electric and telecommunication services, with the exception of telecommunication towers" are permitted by right.

SOLAR ORDINANCE

DEFINITIONS

This narrative has been prepared in accordance with the draft Solar Energy Projects Ordinance², which is expected to govern the detailed regulations of the Project. Section 66-1241 provides the relevant definitions for the Project, including the following:

"Distribution Lines means utility lines that transport electricity, generally from substations to a load point at lower voltages and over shorter distances than transmission lines.

Solar Energy Facility means an installation principally designed and used to capture and convert solar energy into electric or thermal energy for off-site use, such as transmission to the power grid. The area of the system includes all land inside the perimeter, which extends to any fencing. The term applies, but is not limited to, solar phot-voltaic ("PV"), solar thermal and solar hot water systems. This subdivision does not apply to residential solar energy generation.

_

² AN ORDINANCE TO RE-CODIFY ZONING FOR SOLAR ENERGY PROJECTS IN THE CODE OF WASHINGTON COUNTY, VIRGINIA, CHAPTER 66, ARTICLE XIV, DIVISION 2, SECTIONS 66-1240 THROUGH 66-1270, to be heard and considered for adoption by the Board of Supervisors on June 11, 2024, as a recodification of Chapter 66, Article XIV, Division 2, Sections 66-1240 through 66-1270 of the Code of Washington County, Virginia (2022). The narrative and SEP submission will be updated as needed should the draft ordinance be revised after the date of the submission of this application.



Solar Energy Project means a single device or an assemblage of devices used and designed to use sunlight to generate electrical or mechanical power or designed for liquid transfer of solar-generated heat to use within buildings. Devices used in solar energy projects may include solar modules, inverters, transformers, transmission facilities, supporting systems and any and all components necessary for the generation, transmission and interconnection and monitoring of the power or liquid heat thereby generated.

Solar Energy Project, Large Scale, Large Scale Solar Energy Project, or Large-Scale Project means any solar energy project that is not a small-scale solar energy project.

Solar Module or Photovoltaic Module means a circuit of photovoltaic cells sealed in an environmentally protective laminate and is the fundamental building block of solar energy projects.

Solar panel means one or more solar modules assembled as a pre-wired, field installable unit.

Transmission lines means utility lines that transport bulk electricity, generally from power stations to substations at high voltage ranging from sixty (60) kW to five hundred (500) kV."

The Project is a "Solar Energy System" that may be allowed by special exception permit. It is expected to have a nameplate capacity of (up to) 262 megawatts AC (MWac) and is to be installed within the approximately 1,575 fenced acres of the 2,253-acre Property. The Project will annually deliver approximately 575,000 megawatt hours of clean, emissions-free power to the local electrical grid operated by Dominion Energy Virginia, enough to power approximately 42,000 homes across the region.

PROJECT COMPLIANCE WITH SOLAR ORDINANCE

The Project will comply with all local, state, and federal laws and regulations. The narrative below explains how the Project will meet the requirements of the Zoning Ordinance.

Sect. 66-1242: General Guidelines and Requirements

All solar energy facilities shall be subject to the following standards:

 Certain solar facilities exempt. Solar facilities dedicated primarily to the production of electricity for another facility on the site and solar facilities permitted by Code of Virginia, § 15.2-2288.7 shall not be subject to the conditional use permits. Smaller solar projects do not require a special exception permit and are allowed in all zoning districts.

This provision is inapplicable to this application.

2. Siting Agreement required. The Code of Virginia § 15.2-2316.6, § 15-2316.7, and § 15.2-2316.8 provides that any applicant for a solar project or an energy storage project shall give to the host locality written notice of the applicant's intent to locate in such



locality and request a meeting to discuss and negotiate a siting agreement with such locality, which may contain terms and conditions, including (i) mitigation of any impacts of such solar project or energy (ii) financial compensation to the host locality to address capital needs set out in the (a) capital improvement plan adopted by the host locality, (b) current fiscal budget of the host locality, or (c) fiscal fund balance policy adopted by the host locality; or (iii) assistance by the applicant in the deployment of broadband and provides that the governing body of a host locality shall have the power to: hire and pay consultants and other experts on behalf of the host locality in matters pertaining to the siting of a solar project or energy storage project; meet, discuss and negotiate a siting agreement with the applicant, enter into a siting agreement that is binding upon the governing bodies of the locality and enforceable against it and future governing bodies of the host locality in any court of competent jurisdiction by signing a siting agreement pursuant to this article. Such contract may be assignable at the parties' option. If both parties agree upon the siting agreement terms and conditions, the host locality shall schedule a public hearing, pursuant to subsection A of § 15.2-2204, for the purpose of consideration of such siting agreement.

The Applicant has provided the required notice, pursuant to Va. Code § 15.2-2316.7.A, of its intent to locate a solar facility in the County, has met with County officials, and has submitted a draft Siting Agreement to the County. Discussions regarding the terms of the Siting Agreement are ongoing, and the Applicant looks forward to entering into a siting agreement with the County.

3. Site plan required. The Code of Virginia §15.2-2232, provides that a local planning commission may recommend a comprehensive plan or part thereof for the locality and if such plan is approved and adopted by the governing body, it shall control the general or approximate location, character and extent of each feature shown on the plan. Solar facilities must be developed in accordance with an approved site plan that meets the standards of Section §15.2-2232. The Code of Virginia §15.2-2239, provides that the local planning commission may, and at the direction of the governing body, shall, prepare and revise annually a capital improvement program based on the comprehensive plan of the locality for a period to not exceed five years.

Please see the enclosed Concept Plan, dated May 29, 2024 prepared by Timmons Group (<u>Exhibit C</u>), which shall be referred to throughout this narrative as the "Plan" or "Plans."

Pursuant to Va. Code § 15.2-2316.9.C, approval of a siting agreement by the Board of Supervisors in accordance with subsection B of § 15.2-2316.8 shall deem the Project to be substantially in accord with the County's Comprehensive Plan, thereby satisfying the requirements of Va. Code § 15.2-2232.

4. Approved Solar Components. Electrical solar components must have an approved UL listing or equivalent.

Acknowledged.



5. *Distribution lines*. To the extent reasonably practical, all new distribution lines to any building, structure, or utility connection shall be located underground (trenched) to the extent permitted by the electric company.

The Solar Facility will connect to the substation adjacent to the gas plant property via two lines that cross the railroad. Because of the railroad crossing, the lines must be on poles above ground.

6. Compliance with building code. All active solar facilities shall meet all requirements of the Virginia Uniform Statewide Building Code as well as all federal and state statutes, codes, regulations, and ordinances; and shall be inspected by the Washington County Building Official.

The Project will meet all requirements of applicable Building Codes.

(a) Compliance with the Comprehensive Plan: All potential solar facilities shall demonstrate how they meet the requirements of the Washington County Comprehensive Plan, which allows for the exploration of alternative energy sources while protecting environmentally sensitive areas and minimizing impact with adjacent residential and commercial areas.

Please refer to Timmons Group's Environmental Resource Impact Analysis (ERIA), attached as <u>Exhibit D</u> for information regarding the protection of wetlands and streams, wildlife resources, cultural and historic resources, and protected lands.

7. Land Disturbance. A land disturbance plan shall be prepared by an engineer, submitted by the applicant, and approved and by the Stormwater Administrator and in compliance with the Commonwealth of Virginia Department of Environmental Quality prior to any land disturbance. The owner or operator shall construct, maintain and operate the project in compliance with the approved plan. An E&S bond (or other security) will be posted for the construction of the project. No large-scale solar facility shall be permitted on land that has been clear-cut or heavily timbered in the five (5) years immediately preceding the date of application. Placement of utility-scale solar facilities should be prioritized on existing impervious surfaces. This land disturbance plan does not replace the Erosion and Stormwater Plan which also must be submitted in Washington County where 10,000 square feet or more of land disturbance is proposed. Grading and fill shall be avoided. If grading is required, it should not result in the loss of agricultural soils (A Horizon) and should be completed in phases to reduce erosion and sediment runoff. In cases where grading is required, topsoil should be removed from the area prior to grading. Topsoil should be stored on site and replaced after the grading is completed. Compression mats should be employed to avoid compaction of soils from heavy equipment.

The Applicant's engineering firm, Timmons Group, will prepare a land disturbance plan, which shall be submitted to the Stormwater Administrator and the Commonwealth of Virginia Department of Environmental Quality (DEQ) for approval prior to any land disturbance. The Project shall be constructed, maintained and operated in compliance with the approved plan. An Erosion and Stormwater Plan will be submitted to the County, and



a bond (or other security) will be posted for the construction of the project. The Project is not proposed on land that has been clear-cut or heavily timbered in the five (5) years immediately preceding the date of this application. Some grading will be required. The Applicant uses grading and topsoil practices in compliance with the rules and protocols published by the DEQ and will comply with County requirements.

8. *Utility notification*. No grid tied photovoltaic system shall be installed until evidence has been submitted to the planning department that the developer and/or owner has been approved by the utility company to install the system.

Acknowledged.

9. Setbacks. With the exception of poles and lines necessary to connect to the power grid, the perimeter of the system shall be located at least fifty (50) feet from the property line of any adjoining parcel owned by any landowner other than the owner of the parcel on which the solar facility is being proposed, unless the land is contiguous land and the property owner is participating in the solar project, in this instance, internal setback perimeters are waived; at least one hundred (100) feet from the nearest inhabitant residence at the time of the initial application; and at least one hundred (100) feet from the nearest road. If a solar project is mounted on a building, the project may not exceed the maximum building height specified in the building type (primary and accessory) for the zoning district in which the solar project is located.

As shown and noted on the Plans, the Project incorporates property setbacks of 50 feet from adjacent non-participating parcels and 100 feet from public rights of way. The project will be set back a minimum of 100 feet from the nearest residence.

10. Height. With the exception of lighting, poles and lines necessary to connect to the power grid, the height of the structures and arrays in the system shall be ground mounted and not exceed fifteen (15) feet as measured from grade at the base of the structure to the apex of the structure or exceed the maximum building height for accessory structures for the zoning district in which the solar energy project is to be located.

As depicted on the Plans, the Project will use a combination of fixed tilt and single-axis tracking panels. The Project's solar panels will be ground mounted arrays, and the total height of the structures will not exceed 15 feet in height from base to the apex of the structures.

11. Projects located within the airport safety overlay zone shall obtain airport safety overlay zone approval from the Virginia Highlands Airport.

The Virginia Highlands Airport is approximately 1.5 miles east of the site, and the northeast portion of the Project lies within the Airport Overlay District. Virginia Highlands Airport has conducted a preliminary review of the location of the Project parcels and anticipates there will be no impact to their operations. However, Airport engineers intend to analyze more closely potential impacts for a few identified parcels, and the Applicant will submit safety overlay zone approval from the Airport during the building permit application process.



12. Security fencing. The solar facility shall be enclosed around the perimeter by a security fence with a minimum height of six (6) feet with an appropriate anti-climbing device.

As shown on the Plans, all Project areas will be enclosed by a security fence with a minimum height of 6 feet with anti-climbing device.

13. Liability insurance. The applicant shall provide proof of adequate liability insurance, annually, for a solar facility, to be set out in the Siting Agreement, prior to the issuance of a zoning or building permit. This shall be provided to the Zoning Official, annually, upon renewal of policy.

The Applicant will comply with this requirement. The draft siting agreement provides that the Applicant will obtain and maintain in effect comprehensive general liability insurance, as required by the SEP, until decommissioning and removal are complete. A certificate of insurance shall be provided annually upon renewal to Washington County Attorney's Office.

14. Signage. Appropriate warning signage is required on the solar facility fencing, not to exceed thirty-two (32) square feet, displaying warnings, the facility name, address, physical E-911 address and emergency contact information. Facility warning signs shall be the only signs allowed to be posted on the fence.

The Applicant will comply with this requirement.

15. Noise. Inverter noise shall not exceed fifty (50) dBA, measured at the facility property line.

The Applicant will comply with this requirement. The solar energy equipment within the Project will not result in any appreciable off-site noise. Sound would only be generated from equipment located within the interior of the Project envelope and at a sufficiently low level to not rise above background ambient noise levels in rural areas. Additionally, sound is only generated during daylight hours, while the Project is producing energy. Noise will be generated during the construction activities of the development; however, it will be limited to daytime hours, and Wolf Hills will work with its subcontractors and surrounding neighbors to provide a positive experience over the course of construction.

- 16. Vegetative screening. A vegetative buffer yard shall be required and implemented prior to construction of the solar energy facility. Landscaping intended for screening shall consist of a combination of non-invasive species (species listed on DCR's Invasive Plant Species list shall not be allowed), pollinator species, and native plants, shrubs, trees, grasses, forbs, and wildflowers. The vegetative buffer yard shall meet two (2) or more of the following set of requirements.
 - a. Fifty (50) feet wide with;
 - i. Four (4) canopy trees per one hundred (100) linear foot which are at least six (6) feet high at time of planting;
 - ii. Six (6) understory trees per one hundred (100) linear foot which are at least six (6) feet high at time of planting;



iii. Eleven (11) evergreen trees per one hundred (100) linear foot which are at least six (6) feet high at time of planting.

The use of existing, healthy, well-formed canopy trees, understory trees, evergreen trees, and shrubs shall be maximized wherever practical to comply with these vegetative buffer requirements. Any fencing shall be located interior to the vegetative buffer.

Please refer to Sheet C4.0 of the Plans for the Project's conceptual plan of the location and width of the retained vegetative buffers and the proposed vegetative buffers around the perimeters of panel areas within the Project. Sheet C4.1 of the Plans provides details about the tree plantings within the buffers. Four canopy trees at least 6 feet in height at the time of planting and 6 understory trees or 11 evergreen trees at least 6 feet tall at planting are proposed within each 100 linear foot span. A list of recommended trees and buffer plants is also provided.

17. Maintenance. Ground cover on the site shall be maintained in accordance with an approved landscaping plan and possibly a "dual use" maintenance plan. Native grasses or any non-invasive species shall be used to stabilize the site for the duration of the facility's use. The project owner shall be responsible for maintaining the solar facility, the vegetative screening, access roads and fully comply with Virginia Department of Quality, Stormwater and Erosion Control Act and all local ordinances.

Please refer to Sheet C4.1 of the Plans for the Landscape Management Plan, which includes detailed information regarding planting, maintenance, and recommended cover crops.

18. *Glare.* The solar facility shall be installed so that no reflected glare is visible at the property line adjacent to a public road.

The Project will not produce any offsite glare impacting surrounding properties or roadways.

19. FAA requirements. Any solar facilities located within five (5) nautical miles of any airport shall meet all FAA requirements.

The Project will be approximately 1.5 miles from the Virginia Highlands Airport and will obtain an FAA Determination of No Hazard to Air Navigation prior to building permit application submission. Virginia Highlands Airport has conducted an initial review of the project parcels and has concluded there is a strong likelihood of no impact to their operations. Catalyst intends to secure approval from the Virginia Highlands Airport prior to the issuance of the Building Permit, which is issued by Washington County.

20. *Lighting.* All outdoor lighting shall be shielded to direct light and glare on to the system's premises.

The Project does not require any lighting, therefore there will be no light pollution affecting nearby properties.

21. Wetlands. Wetlands shall be inventoried, delineated, and avoided.



Stated in Timmons Group's Environmental Resource Impact Analysis (ERIA), attached as Exhibit D: wetlands and streams are present on the Project site. As the project progresses, more precise locations of wetlands and streams will be delineated by a third party and verified by the United States Army Corps of Engineers (USACE) and the Virginia Department of Environmental Quality (VDEQ). If wetland or stream impacts are unavoidable, the project will obtain the appropriate permits for impacts to jurisdictional wetlands and streams. Wetlands and streams form a natural wildlife corridor, and as they will generally not be impacted by the Project, will remain as interior corridors for wildlife utilization. Wetlands and streams are generally outside the fenced area so free passage of wildlife will be allowed for the duration of the Project. The Virginia Department of Wildlife Resources advises that interior passages through solar projects helps reduce potential impacts to wildlife, to which this project will adhere.

22. Access. The County Administrator, Building Official, Zoning Official, Stormwater Administrator or any other parties designated by those County officials shall be allowed to enter the property at any reasonable time to check for compliance with the provisions of this permit. However, access shall be granted without notice if the security, health and safety standards, and regulations that apply to the project site pose a risk to the general public, environment, or if any other emergent arises.

The Applicant understands and agrees to this requirement.

23. Emergency Services/Personnel. Emergency services and personnel shall be allowed to enter the property without notice, in the event of emergency.

The Applicant understands and agrees to this requirement.

24. Change in ownership or operator and activities. The owner and operator shall provide a written notice to the County Administrator and Zoning Official in the event of any change in ownership, change in the operator, inactivity, or modifications to equipment or activities on site, excluding general maintenance. Any change of ownership may be required to sign a new siting and decommissioning agreement that has been approved by the Board, will be bound by ordinance and successor in interest is bound by any previous siting agreement and decommissioning agreement.

The Applicant understands and agrees to this requirement.

25. Fire Suppression Plan. Prior to generation of power, a Fire Suppression Plan shall be approved by the Washington County Coordinator of Emergency Management Services and the Washington County Building Official.

The Applicant will submit a Fire Suppression Plan for approval by the County prior to power generation.

Additional considerations for conditions:

To Preserve and protect County view sheds and resources, to protect the health, safety and welfare of the community, and to otherwise advance the purpose and intent of this Article, the following non-exhaustive list of additional criteria may be considered by the Planning Commission



and the Board of Supervisors in addressing whether to recommend or grant a permit, and what conditions to impose on any permit for an energy generation facility:

a. The topography of the site, and the surrounding area.

Please see Sheet C5.0 of the Plans for topographical mapping of the subject parcels.

b. The proximity of the site to, observability from and impact on areas on urban and residential areas.

Please seen enclosed as <u>Exhibit F</u> a set of visual renderings of views from various points around the Project to show screening provided by plantings at commencement of operations when plantings are new and at maturity.

c. The proximity of the site to other energy facilities and utility transmission lines.

The Project site was selected based on its proximity to the existing Wolf Hills gas-powered plant with which the Project will share physical interconnection to the electric grid. The Project will hybridize the use of the gas-powered plant operations by combining low-cost solar power during daylight hours with reliable, dispatchable gas generated power during non-daylight hours. The dual operation of the gas plant will result in increased power reliability in Washington County and other neighboring counties. The Solar Facility will connect to the existing substation located adjacent to the gas-powered plant by aboveground poles and transmission lines over acquired easements.

d. The proximity of the site, observability from, and impact on areas of scenic significance and of historical, cultural and archaeological significance.

As discussed in the ERIA, the Project is not expected to have any impacts to cultural and historical resources due to the amount of cultural work required at the state permitting level. In-depth cultural surveys conducted by qualified professionals will be submitted for approval and concurrence by the Virginia Department of Historic Resources (VDHR).

e. The proximity of the site, observability from, and impact on public rights-of-way to include all roads, recreational and state facilities.

As discussed in the ERIA, no federal, state, or local public lands abut the Project. The Washington County Little League complex abuts the southern portion of the Site, and the City of Bristol's Sugar Hollow Park is located 0.4 miles southwest of the Site. Please see Exhibit F for renderings of various views from neighboring roadways and parcels. All abutting parcel information is listed on Sheets C2.6 and Sheet C2.7 of the Plans.

f. The preservation and protection of wildlife and pollinator habitats and corridors.

Discussed in the ERIA: "Timmons Group has conducted a threatened and endangered (T&E) species review of the Wolf Hills Solar project using the Virginia Department of Wildlife Resources (VDWR) Wildlife Environmental Review Mapping System (WERMS). Based on the queried database, there is the potential for the federally and state endangered Northern-Long Eared Bat to occur near the project. The project will coordinate with the



VDWR during state permitting to ensure the protection of the northern-long eared bat. Beaver Creek, a trout stream, runs near the site. Given the location of the stream, the project will be setback at least 100LF from Beaver Creek, which is the VDWR's recommendation for the protection of trout waters. The project will also strictly adhere to stormwater and erosion & sediment control measures, which will further protect Beaver Creek. The Virginia Department of Conservation and Recreation recommends that solar projects plant native and/or pollinator species whenever possible. The proposed seed mix to be planted in disturbed areas underneath the panels consists of both native and pollinator species."

g. The size of the site.

A rule of thumb for the solar industry is that a megawatt of energy can be produced from 6-10 acres of land, depending on topography and geological conditions. The Applicant is estimating 262 MW-AC nameplate capacity could be developed based on several environmental and engineering studies completed during the Applicant's due diligence work.

h. The compatibility with surrounding land uses.

The Solar Facility will produce no off-site noise, odor or emissions. It will have a negligible impact on public services. There are no occupied buildings, no public water, no need for sewer services, and vehicular traffic during the operational lifetime will be minimal. Solar panels and racks will not exceed 15 feet in height, and their visibility will be mitigated by setbacks and existing and new vegetative buffers. Compared to other potential residential, commercial and industrial uses, the Solar Facility will have very minimal impact on the neighboring areas and is fully compatible with all surrounding land uses. For information regarding property values, please see Wolf Hills Solar Impact Analysis prepared by Kirkland Appraisals, LLC, attached as Exhibit I. For details regarding existing transportation assessment, anticipated construction traffic impact, and potential mitigation measures, please see the Timmons Traffic & Route Evaluation Study, attached as Exhibit J.

i. Encourage "dual use" of utility scale solar projects (parking, grazing, agriculture, apiary, etc.)

The Project is proposed as a dual use project in conjunction with the existing gas power plant. The Applicant has commissioned the Agricultural Integration Plan, prepared by Agrivoltaic Solutions, attached as <u>Exhibit G</u> and will consider various agrivoltaic uses.

j. 3rd Party verification of decommissioning cost estimates.

Enclosed as <u>Exhibit E</u> is a Decommissioning Plan, including decommissioning cost estimates, prepared by Timmons Group.

k. The proposed use of available technology, coatings and other measures for mitigating adverse impacts upon the facility.



The Project equipment to be installed – photovoltaic (PV) modules, inverters, mounting racks, and all other components – will be procured from Tier 1 manufacturers and the facility will be constructed in accordance with all applicable local, state, and national codes. The Project components have no materials which will contaminate the air, water, or soil surrounding the Project. Furthermore, the silicon PV modules (solar panels) are solid-state, thus there is nothing to leak or leach out that could impact the environment.

1. The encouragement of economic development activities that provide desirable employment or the enlargement of the tax base.

ECONOMIC IMPACT

For detailed analysis of the economic benefits of the Project on the local economy, please refer to the Mangum Economics report, dated May 2024, attached as Exhibit H³.

Total Capital Investment: Material and labor costs can change due to various market forces, unforeseen site conditions, and other factors. The current estimate for the capital investment to construct the Project is approximately \$386.9 million. Of that total, approximately \$221.9 million would be for architecture, engineering, site preparation, and other construction and development costs. Capital equipment costs are estimated to be approximately \$165.1 million; it is not anticipated that capital equipment would be purchased locally. Construction of the project will generate labor opportunity and labor income spurring economic development for regional businesses, such as those providing services in engineering, construction subcontracting, consulting, landscaping, and hospitality.

Local Labor: Local labor will be used for the construction and maintenance of the Project to the extent commercially available. Most often, local excavation and site work companies are used to prepare the site for construction, and teams of solar-specific construction crews install the Project facilities. Given Virginia's fast-growing solar industry, the local and regional technical expertise in solar construction is expanding. The proposed Project would employ approximately 890 local and non-local full-time equivalent construction workers over a representative 12-month construction period. (Construction is expected to take approximately 20-25 months.) During the construction phase, the Project would support 147 direct and 115 indirect and induced job years⁴, \$14.7 million in associated wages and benefits, and \$64.3 million in economic output.

Estimated Economic Impact: During its operational phase, the Project is estimated to support 3 direct and 9 indirect and induced jobs and to generate \$2.9 million in economic output.

-

³ Please note that the Mangum report cites the Project acreage as 1,900, but additional land was added to the Project acreage, which is not yet reflected in the report. An updated report will be issued to the board during the week of June 3rd, 2024.

⁴ One job year = one job over one year. It is used to denote employment on projects where the time period is not exactly equal to one year.



Increase in Real Estate Tax Revenue: Once the Project is permitted, the value of the underlying real estate will increase significantly, providing notably more revenue per acre than timber or agricultural uses. Many of the parcels are in the land use taxation program, so rollback tax will be paid to the County following the change in use. Mangum estimates the Project will generate approximately \$172,000 in rollback tax, \$94,500 annually in real estate tax, for a cumulative real estate tax revenue of almost \$3.5 million over the anticipated 35-year operational life as compared to \$348,200 for that same time period should the Property currently in agricultural use continue in that use and be taxed based on land use program assessments.

Revenue Share: The Zoning Ordinance includes a new provision for Revenue Share (Section 16-1244). The County will assess up to \$1,400 per megawatt annually. The maximum amount of revenue share shall be increased on July 1, 2026 and every 5 years thereafter. Over the 35-year expected life of the project, the total revenue share is calculated as \$19,522,200.

Voluntary Payment: The Applicant has offered voluntary payments in addition to taxes and revenue share by way of the siting agreement. These funds may be used by the County to address capital needs set out in its capital improvement plan, fiscal budget, or fiscal fund balance policy, or to assist with broadband deployment in the County.

- m. The preservation and protection of prime farmland and forestland in the County, provided that:
 - a. "Prime farmland" shall have the meaning assigned to it by the Natural Resource Conservation Service of the United States Department of Agriculture.
 - b. If no more than five percent (5%) of the site is prime farmland or includes Soils of Statewide Importance, this consideration will be waived.
 - c. To improve the range of accuracy and determine what percentage of the site is considered "prime farmland" or "Soils of Statewide Importance," a Virginia licensed soil scientist should be hired to produce a high-definition soil map of the proposed areas.

A Prime Farmland Map is included as Figure 4 of the ERIA, which provides the following explanatory comments: "Based on the Natural Resources Conservation Service (NRCS) soils data, there are soils classified as prime farmland and farmland of statewide importance on site. Prime farmland is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for those uses. There are approximately 58.01 acres of prime farmland soils on the site, and only 3.37 acres are within the solar panel area. The Virginia Land and Energy Navigator, a data service of the Virginia Cooperative Extension, classifies prime farmland in the Commonwealth. This dataset matches the analysis prime farmland area soils. Less than 1% of the project area that is planned for development is considered prime farmland. Farmland of statewide importance generally includes areas that almost meet the requirements for prime farmland and that economically produce high yields of crops when treated and managed according to acceptable farming methods. There are approximately



1,358 acres of soils classified as farmland of statewide importance on the property and 742.74 acres in the solar panel area. Washington County has a total of 125,832 acres of soils that are considered farmland of statewide importance. The Wolf Hills Solar project only plans to develop on 0.6% of those soils."

n. The ability to enter into an agreeable siting plan or siting agreement with the County.

The Applicant has been working diligently with County officials to come to an agreement on a siting agreement, which will include payments to the County at commencement of construction and upon commercial operation.

The enumeration of these criteria shall not prohibit the Planning Commission or the Board of Supervisors from considering other factors deemed relevant to a specific special exception permit applicant based upon the details of the application. Nothing herein shall limit in any manner the nature and scope of reasonable conditions that may be recommended by the Planning Commission or imposed by the Board of Supervisors.

Sec. 66-1243: Permitting Applications and procedures

- a. All solar energy projects that are regulated by this division shall obtain certification of zoning compliance by the County Zoning Official before installation. In addition to zoning compliance certification, all projects must comply with applicable building code requirements, stormwater and erosion requirements. All projects must comply with the Virginia Stormwater Management Act and Washington County Erosion and Stormwater Management Ordinance(s).
- b. Applicants for zoning compliance certification for all solar energy projects shall include the following items.
 - Scaled horizontal and vertical (elevation) drawings. The drawings must show the location of the project on the parcel for a ground-mounted project, including the parcel boundaries and setback lines, and on the building for integrated or on-building-mounted projects.
 - 2. Written acknowledgement of the property owner of responsibility for the solar project.
 - 3. Documentation to show compliance with the requirements set forth in this Division.
 - 4. For solar projects that are not mounted on or over a building, a certified statement of the area in square feet or acreage of disturbance zone and explanation of how such figure was determined (e.g., by professional survey or by personal measurement).

The Applicant will obtain the required zoning certification and will comply with all applicable building code and stormwater and erosion control requirements, including the Virginia Stormwater Management Act and the County Erosion and Stormwater Management Ordinance.



- c. Special exception permit requirements.
 - 1. Small scale solar projects do not require a special exception permit and are allowed in all zoning districts.
 - 2. Large scale solar projects require a special exception permit before installation may begin, subject to the following exceptions, and are allowed in all zoning districts. Large scale solar projects in the manufacturing-limited (M-1) and manufacturing general (M-2) zoning districts do not require a special exception permit.

For large scale solar projects, a completed special exception permit application, with exception of such projects located in the manufacturing-limited (M-1) and manufacturing-general (M-2) zoning districts.

3. Special exception permits may include conditions as determined by the Board of Supervisors to be necessary to carry out the intent of this division.

This narrative is submitted as a component of the Special Exception Permit Application required for the proposed Project, excepting the parcels in the M-2 zoning district, which do not require a special exception. The Applicant acknowledges that the Board of Supervisors may impose conditions on the Special Exception Permit and respectfully requests the opportunity to review the conditions prior to the Board of Supervisors hearing.

Sec. 16-1244: Revenue Share [Ordinance language omitted.]

Please see discussion above in the Economic Impacts section of this narrative.

Sec. 66-1245: Decommissioning Agreement, Plan, and Surety Bond

- 1. Decommissioning Agreement and Surety. Prior to installation of a large-scale project, the project or property owner shall record in the land records of the Circuit Court of Washington County, a County-approved Decommissioning Agreement. The Decommissioning Agreement shall include the decommissioning plan and the owner's commitment to comply with the County Zoning Ordinance as such may be amended from time to time and shall be written to run with the land and terminate upon removal from the property of the solar project and completion of site restoration. The decommissioning agreement will include the following terms and conditions:
 - a. The system owner and owner of the land shall provide surety to the locality in the form acceptable to the County, based upon an estimate of a professional engineer licensed in the Commonwealth with experience in preparing decommissioning estimates and approved by the locality; such estimate shall not exceed the total of the projected cost of decommissioning, which may not include the net salvage value of such equipment, facilities or devices, plus a reasonable allowance for estimated administrative costs related to the default of the owner, lessee, or developer, and an annual inflation factor and shall be updated every five (5) years. Surety instruments shall only be released after decommissioning



has been completed in accordance with the provisions below, Siting agreement and Decommissioning Agreement, and;

- b. The system owner and the owner of the land on which the solar facility is located shall be responsible and liable, jointly and severally, to begin removing all obsolete or unused systems, facilities and equipment within six (6) months of cessation of operation and shall have them fully removed within twelve (12) months.
- c. All component disposal of a solar energy project shall comply with all requirements of local, state and federal law and regulations and are to be recycled whenever feasible and disposed in locations other than Washington County, Virginia.
- d. Reasonable extensions of that time may be granted from time to time by the Zoning Official upon timely application and a showing that:
 - i. The system owner and/or landowner are actively seeking sale or lease of the solar facilities for future operation; or
 - ii. The system owner and/or landowner have continuously maintained the land and facilities in good condition.
- e. If the owner defaults in the obligation to decommission such equipment, facilities or devices in the timeframe set out in such agreement, the locality has the right to enter the property on which the solar project is located without further consent of such owner and engage in decommissioning.
- f. Every charge authorized by this section which remains unpaid shall constitute a lien against the property on which a solar facility is located ranking on a parity with liens for unpaid County taxes and enforceable in the same manner as provided in the Code of Virginia§ 58.1-3940 et seq. and§ 58.1-3965 et. seq., as amended.

The decommissioning plan must provide for the disconnection from the power grid at a minimum; removal of all solar electric systems, buildings, cabling, electrical components, security barriers, roads, foundations, pilings, and any other associated facilities, so that the ground is again tillable and suitable for agricultural purposes. Disturbed earth shall be graded and reseeded. Hazardous material shall be disposed of in accordance with federal and state law.

Enclosed as <u>Exhibit E</u> is a Decommissioning Plan. Based on the requirements of the foregoing Sec. 66-1245 of the Zoning Ordinance, the Applicant will enter into a decommissioning agreement with the County, which agreement will be recorded in the land records of Washington County.



EXHIBITS:

- A. Catalyst Energy Corporate Information
- **B. Project Tax Map Parcels**
- C. Conceptual Plan
- D. Environmental Resource Impact Analysis
- E. Decommissioning Plan
- F. Visual Renderings
- G. Agrivoltaic Solutions Agricultural Integration Plan
- H. Mangum Economics Report
- I. Kirkland Appraisals Property Values Impact Analysis
- J. Traffic & Route Evaluation Study