DORCHESTER COUNTY BOARD OF APPEALS

SUPPLEMENTAL NARRATIVE FOR SPECIAL EXCEPTIONS AND VARIANCE APPLICATION
1. SOLAR ENERGY SYSTEM, UTILITY SCALE
2. UTILITY STRUCTURE (SUBSTATION)
3. VARIANCE OF FENCE HEIGHT LIMIT TO PERMIT 8' FENCE

APPLICANT: OneEnergy Sunnee Bee Solar, LLC

REQUEST: Special exception to permit the construction and operation of a utility scale solar energy system to generate renewable power.

INTRODUCTION:

The application requests the following Board of Appeals approvals: (1) special exception approval for the establishment of a utility scale solar energy system on lands leased by Applicant along Linkwood Road ("Project"), (2) special exception approval for the installation of a substation on one of two proposed sites, as described below, to deliver the renewable energy to the electrical grid, and (3) a variance to permit construction of 8' tall security fencing around the Project and the substation.

The Project site is located south of the East New Market on the east and west sides of Linkwood Road and is comprised of the following three parcels of land: (1) 195.724 acres identified as Map 32, Grid 6, Parcel 10, owned by Kimberlee A. and Blair M. Bisker, and abutting Linkwood Road; (2) 212.337 acres identified as Map 33, Grid 1, Parcel 84, owned by Kimberlee A. Bisker, and abutting Linkwood Road; and (3) 27.58 acres of the 40.19 acres identified as Map 21, Grid 24, Parcel 100, owned by Warwick Corporation and abutting the East New Markey Bypass (Maryland Routes 16/392). The foregoing acreages differ slightly from tax records and were determined by field survey.

The Project consists of an array of single-axis tracking photovoltaic panels installed on metal racks in a north to south orientation and rotating throughout the day to maximize the exposure to sunlight and conversion of sunlight into electrical power. The current generated by the array will be managed by inverters and associated equipment installed within the fence-enclosed array site, and will then pass through a substation located on-site before interconnecting with Delmarva Power & Light Company's ("Delmarva Power") existing transmission facilities. Since transmission review and engineering is not yet finalized, the site plan submitted with the application identifies two possible locations for the proposed substation. Following approval of this Application, Delmarva Power will determine which location will be used for construction of the substation.

The Project will utilize twenty foot (20') wide gravel roads to provide all weather access for inspection and service of the Project, except that Delmarva Power may require 30' wide access roads and gate(s) to the substation. A seven foot (7') tall chain link fence topped by one foot (1') of barbed wire will surround the perimeter of the solar arrays, equipment and substation. The

Project was designed to minimize impacts to nontidal wetlands and wetland buffers. No portion of the Project site lies within the Critical Area.

Section 155-20, Special Exception Criteria (Solar Energy System):

The Applicant addresses requirements of Section 155-20 of the Dorchester County Code ("Zoning Ordinance") with respect to the Solar Energy System (Utility Scale) as follows:

1. The proposed use will be consistent with the County Comprehensive Plan.

The proposed solar energy system is consistent with the purposes and intent of the Dorchester County Comprehensive Plan ("Plan"). The Comprehensive Plan is intended to enhance the quality of life and protect the rural character of Dorchester County while protecting residents' health, safety and welfare. The proposed solar energy system will provide a clean, sustainable energy helping to protect and enhance public health and quality of life and support the reduction of pollution and the mitigation of climate change. The solar energy system will generate sustainable electrical energy that will be added to the electrical grid within the County.

Chapter 3 of the Plan calls for the County to provide a strategic effort to create a more diversified economic base for the County. In particular, the Plan recommends the County undertake efforts to retain or expand existing businesses and to market the region as a premier location for innovative businesses. The County has, in some respects, served as a leader in the renewable energy industry through the construction of renewable energy project in other areas of the County. The construction of distributed generation is one important strategy to minimize transmission cost and congestion and enhance the reliability and efficiency of the region's electrical grid. The Project is of the kind that reinforces the image of the County to one that is forward-thinking, innovative, and demonstrative of the County's sincere efforts to protect the environment and natural features that make the County unique.

2. The proposed use will be in harmony with the general character of the neighborhood, considering population density, design, scale, and bulk of any proposed new structures, intensity and character of activity, traffic and parking conditions, and number of similar uses.

The character of the area is generally defined by agricultural fields and structures and forest vegetation to the south, west, and east. East New Market, a small town is located to the north. Interspersed in this setting are a railroad right-of-way, a State highway, electric transmission facilities, self-storage business, automotive garage, the East New Market Volunteer Fire Department, and a major propane storage and distribution facility. The solar energy system is proposed to be constructed on land currently tilled for grain production. The Project is generally located a considerable distance from the State highway. Vegetated buffers will be planted to screen views of the solar arrays and related equipment from the Bypass, Linkwood Road and nearby residences. Limited residential uses are clustered approximately 600 feet northwest, 1200 feet north, and south of the site,

but views of the Project will be greatly limited from any nearby residence due to existing vegetation, broad and distant vistas over agricultural fields and the landscape buffers proposed to screen the Project. The heights of the panels, inverters and other equipment will be below that of the landscape screen in several years and generally similar to the height of passenger vehicles that use the adjacent roads. Although the solar energy system will occupy a greater footprint, it will be lower in height and smaller in bulk than the propane storage facility located north of the site or the residences in the vicinity. Accordingly, the Project is designed to be compatible in terms of scale, bulk and general appearance with adjacent land uses and with existing and potential uses in its general area.

The facility will convert existing agricultural lands to an alternative renewable use that does not generate significant noise, traffic, or other external impacts. The Project will be effectively screened by vegetative buffers and will not detract from the character of the surrounding area. All access to the solar energy system will be provided from the East New Market Bypass or Linkwood Road. Following construction, traffic associated with the Project will consist of periodic, low-volume vehicular trips for inspection and maintenance of the facility, including the landscaping and grounds. This traffic level is comparable to the traffic associated with the existing agricultural operations on the site.

3. The proposed use will not be detrimental to the use, peaceful enjoyment, economic value or development of surrounding properties or surrounding neighborhoods.

The rural area surrounding the Project site consists primarily of forest and agricultural fields, with a cluster of low-density residential uses to the north and south and limited institutional or industrial uses to the north. The Project was configured to minimize views from or impacts of other properties. Due to the almost complete absence of vehicular traffic, noise, and air impacts, the Project will not infringe upon the peaceful enjoyment of existing neighboring properties. The Project is compatible with the pattern of existing developed land use in the vicinity and will not be detrimental to the use, peaceful enjoyment, or economic value of existing neighboring property.

The Project will not emit any noise, light, odor or other potential nuisance to other properties in the vicinity. The Project will not present any hazards to public health, safety or welfare. The solar modules and equipment also do not present any health hazards. The Project will not be such as to create a nuisance to other properties in the vicinity, or their occupants, nor a hazard to public health, safety or welfare.

4. The proposed use will cause no objectionable noise, vibration, fumes, odors, dust, glare, or physical activity

The Project is designed to negate or minimize any adverse impacts on the surrounding area. All construction debris will be removed from the Property. Since human activity at the site will be limited to periodic visits for inspection and maintenance,

and because there is no substantial moving parts or machinery aside from the tracking solar panels, the Project will not generate trash, odors, significant noise beyond the Project boundary fence, vibration, air and water pollution and other health and safety factors or environmental disturbances. The glass covers of the solar panels and their coatings are designed to capture (not reflect) sunlight, so the facility will generate virtually no glare. Further, the Project will comply with Maryland's strict stormwater management policy. The solar farm will convert land presently used for grain production to a vegetative land cover, thereby potentially reducing chemical inputs and eliminating tilling and recurrent ground disturbance. These changes will maintain or improve the quality of the runoff from the site. Wetland disturbances are limited to those necessary for minor ditch crossings, which are minimized by the site design.

The project will utilize environmental site design, maintain limits of disturbance to protect natural areas, control construction equipment and vehicles, evaluate and appropriate site clearing, evaluate and designate site area for phasing and sequencing, identify soils subject to high risk for erosion and apply advanced techniques for stabilization, identify steep slopes and designate limitations on clearing the slopes and to evaluate and stabilize requirements and time limits and protection measures for discharges to nearby watersheds.

5. The proposed use will have no detrimental effect on vehicular or pedestrian traffic.

The Project will not adversely affect vehicular traffic. The Project will be accessed via private lanes from Linkwood Road and Maryland Route 16/392. Vehicular traffic will not be adversely affected because vehicular access to the site will occur infrequently after construction is complete. No employees will report to the site on a full-time basis. This infrequent vehicle access will primarily be for maintenance of the modules and equipment, and will typically involve only one vehicle at a time after the Project is constructed. The projected traffic volumes will not exceed the capacity of any public or private road in the area. Any resulting commercial and truck traffic will not use a residential street nor create a hazard to a developed residential area. There will not be access to the site from any developed residential area. No significant pedestrian traffic occurs in the area, nor is any anticipated. The Project will not have a significant adverse effect upon pedestrian or vehicular traffic.

6. The proposed use will not adversely affect the health, safety, security, or general welfare of residents, workers, or visitors in the area.

All components of the Project are located inside secure fence enclosures to prevent inadvertent access and protect trespassers and the general public. The Project will not result in any noise, dust, glare, odors or traffic, therefore, it will not adversely affect the health, safety, security or general welfare of residents, workers or visitors in the area. In fact, since the Project will provide distributed generation to the Dorchester County electrical grid, it may enhance the reliability of electrical service in the area. Accordingly,

the Project will not adversely affect the health, safety, security and general welfare of residents, workers or visitors in the area.

7. The proposed use will not, in conjunction with existing development in the area and development permitted under existing zoning, overburden existing public services and facilities, including schools, police and fire protection, medical facilities, water, sanitary sewer, public roads, storm sewers, drainage and other public improvements.

The Project will not adversely impact public facilities or services. It is not located near any school, water, sewer, or other public facilities. The Project will be automated and will not house any new residents. The Project will not use, burden or otherwise affect schools, water, sewer or other public facilities or services. The site will be secured by appropriate fences and will not impact police and fire protection.

8. Subject to the Board's approval of the fence height variance discussed below, the enclosed site plan demonstrates compliance with all definitions and specific standards established by the Zoning Chapter for the proposed use.

§ 155-50. (LL) Supplementary Use Regulations, Solar Energy Systems, Utility Scale

Supplementary use regulations, LL. Solar Energy Systems, Utility Scale apply to the Board of Appeals and their findings regarding Special Exception approval for Solar Energy Systems, Utility Scale projects.

(a) The solar array has been designed to meet all applicable codes and avoid adverse effects including glare and reflection on adjacent properties and roadways. Additionally, the solar project will not interfere with traffic or create a safety hazard. Solar photovoltaic panels are designed to minimize glare and typically reflect only about two percent (2%) of incoming light, which is lower than standard reflectivity of water or window glass. The vegetated buffers, existing vegetation and distant views across agricultural files will screen or diminish views of the Project from adjacent properties and roadways.

(b) No advertising is proposed except for reasonable signage to identify the operation and no lighting of the solar energy system is proposed except to the extent required for safety, maintenance or temporary repair.

(c) The proposed use or structure is located on portions of three parcels of land and will consist of a total of 435.641 acres and is the subject of this special exception application. The total acreage of disturbed area within the Project boundary fence of the solar array will not exceed 185 acres.

(d) As indicated by the site plan, the proposed structure or the collection or combination of solar devices will not exceed the height recommended by the manufacturers and will be less than 45 feet.

(e) The site plan submitted with the application depicts the landscape screening that the Applicant desires to have approved by the Planning Commission. To minimize use of agricultural lands, in some circumstances, the screening proposed is less than 50' in width. If approved by the Board of Appeals, the reduction or waiver of the screening requirement is subject to the determination of the Planning Commission during the site plan review process, which will occur following the Board's determination. Additionally, the Applicant will present a compliance plan that demonstrates that the presumptive 50' buffer standard can be satisfied if the Planning Commission does not approve reductions or waivers. The Applicant respectfully submits that the findings required of the Board of Appeals for approval of this application are satisfied by the plans submitted herewith. Any additional landscaping required by the Planning Commission's determination should bolster such findings and should not require modification of the special exception approval.

(f) Each solar energy system, utility scale use, including solar collection devices, associated buildings, and accessory structures will meet the principal structure minimum yard depth requirements (setbacks) for the AC, Agricultural Conservation zoning district.

(g) All structures associated with the solar energy system have been designed and located so as to not be visually intrusive or inappropriate to their setting. The only structures proposed other than the solar panels will house power inverters and control equipment. They are small in scale, will be located interior to the solar facility and will be screened from view. The Project will not unreasonably interfere with the view of, or from, sites of public interest such as public parks, designated scenic byways, historic structures, or the Chesapeake Bay and its tributaries.

(h) No material removal of existing vegetation is proposed. Any hedgerow or ditch clearing associated with the Project will be authorized by the site plan review process and mitigated in accordance with applicable law.

(i) On-site power lines will be placed underground except where necessary to connect to the public utility or to cross Linkwood Road and the railroad right-of-way. The entire Project will be secured by fence and all gates, access doors and electrical equipment will include appropriate warnings and be lockable.

(j) All construction and modification will be performed in accordance with applicable building and electrical permits and all local, state and federal laws.

(k) The enclosed site plans comply with the requirements of subsection (k) and the required planning plan and planting and maintenance agreement and surety will be submitted prior to issuance of the building permits.

(l) No response required.

(m) Not applicable, as no portion of the Project is located within the Critical Area.

(n) No response required.

Section 155-20, Special Exception Criteria (Utility Use/Structure – Electric Substation):

This application seeks approval of two alternative sites for construction of one electric substation to serve the solar energy system. This Application proposes two potential acceptable sites. Provided that both sites are approved by the Board of Appeals, the final selection of the substation location is intended to be determined by Delmarva Power as necessary to satisfy electrical engineering and transmission requirements. The substation is classified as a "utility use and structure" by the existing County zoning regulations, which use and structure are permitted by special exception.

For clarity, the proposed sites shall be denoted "West Substation" and "East Substation", which are shown on the Site Plan on Sheets C-4 and C-8, respectively. The West Substation site lies on a 27.58-acre section of the 40.19 acres identified as Map 21, Grid 24, Parcel 100, owned by Warwick Corporation and abutting MD Route 392. The East Substation lies on the northeast corner of 212.337 acres identified as Map 33, Grid 1, Parcel 84, owned by Kimberlee A. Bisker, and abutting Linkwood Road. A 20-30' wide gravel road will serve the substation and a seven foot (7') tall chain link fence and additional one foot (1') of barbed wire will surround the perimeter of the arrays and their equipment.

The Applicant addresses requirements of Section 155-20 of the Dorchester County Code ("Zoning Ordinance") as follows:

1. The proposed use will be consistent with the County Comprehensive Plan.

   The County Comprehensive Plan recommends the support and retention of existing businesses. Although the Plan places an emphasis on transportation and water/wastewater systems, the Comprehensive Plan also recognizes importance of maintaining and enhancing infrastructure critical to the business climate and public health, safety and welfare. Approval of the proposed substation improvements clearly accomplishes those objectives.

2. The proposed use will be in harmony with the general character of the neighborhood, considering population density, design, scale, and bulk of any proposed new structures, intensity and character of activity, traffic and parking conditions, and number of similar uses.

   The size and appearance of the substation will be minor and shielded from view by existing or planted screening buffers. There are small residential areas to the north and south of the Project but it is not uncommon to locate electric substation near the residential areas that they serve. The surrounding area also includes the East New Market Volunteer Fire Station and propane fuel facility abutting MD Route 392. The West Substation will be located adjacent to existing Delmarva Power transmission poles and infrastructure along the State highway. The East Substation will be similarly close to existing electric transmission but is screened from view by existing vegetation.

3. The proposed use will not be detrimental to the use, peaceful enjoyment, economic value or development of surrounding properties or surrounding neighborhoods.

Following temporary activity associated with construction, the nature and duration or physical activity or other disruptions of neighboring properties are going to be minor, infrequent, and insignificant. The presence of an electrical substation will have no impact on surrounding agricultural or residential properties and the substation, as noted above, will be shielded from view by existing tree lines and/or screening buffers. The proposed substation will not be detrimental to the use, peaceful enjoyment, economic value or development of surrounding properties or surrounding neighborhoods.

4. The proposed use will cause no objectionable noise, vibration, fumes, odors, dust, glare, or physical activity.

The proposed improvements will not cause objectionable noise, vibration, fumes, or odors. The gravel pad of the substation is proposed to provide a stable, all-weather surface to prevent dust and accommodate access for maintenance and repair of the improvements. Any substation lighting will be shielded to avoid direct glare onto neighboring properties. Other than temporary activity during construction, physical activity levels on the site will not change materially from its current agricultural use, as much of the substation monitoring and operation is conducted remotely.

The project will utilize environmental site design, maintain limits of disturbance to protect natural areas, control construction equipment and vehicles, and protection measures for discharges to nearby watersheds.

5. The proposed use will have no detrimental effect on vehicular or pedestrian traffic.

Neither substation location will adversely affect vehicular traffic. The West Substation would be accessed via a private lane from MD Route 392. The East Substation would be accessed from Linkwood Road or via an access drive from Richardson Road (subject to acquisition of necessary right-of-way). The proposed substation equipment will not result in any long-term change to the vehicular or pedestrian traffic pattern in the area. Vehicular access during construction will be coordinated to avoid creating any detrimental effect on vehicular and pedestrian traffic

6. The proposed use will not adversely affect the health, safety, security, or general welfare of residents, workers, or visitors in the area.

All components of the substation will be located inside a secure fence enclosure to prevent inadvertent access and protect trespassers and the general public. As noted above, the proposed substation will not result in any noise, dust, glare, odors or traffic, therefore, the modified substation will not adversely affect the health, safety, security or general

welfare of residents, workers or visitors in the area. In fact, the distributed generation that will be added to the electrical grid by the substation may enhance the reliability of electrical service in the area, thereby improving the health, safety, security and general welfare of residents, workers or visitors in the area.

7. The proposed use will not, in conjunction with existing development in the area and development permitted under existing zoning, overburden existing public services and facilities, including schools, police and fire protection, medical facilities, water, sanitary sewer, public roads, storm sewers, drainage and other public improvements.

The substation will not impose any burden on public services or facilities. The proposed substation similarly will not generate any adverse impact on schools, police and fire protection, medical facilities, water, sanitary sewer, public roads, storm sewers, drainage and other public improvements. The entrance will provide access necessary for maintenance and repair of the substation and will be constructed in accordance with applicable requirements and approvals of the State Highway Administration (West Substation) or Dorchester County (East Substation). Based on the very limited traffic volume expected to utilize the substation, public roads will not be overburdened.

8. The proposed use meets the definitions and specific standards set forth elsewhere in this chapter for such use.

Subject to the Board's approval of the fence height variance discussed below, the enclosed site plan demonstrates compliance with all definitions and specific standards established by the Zoning Chapter for the proposed improvements.

DORCHESTER COUNTY BOARD OF APPEALS
Application for Variance – Fence Height

APPLICANT: OneEnergy Sunnee Bee Solar, LLC

REQUEST: Variance permitting eight foot (8') tall fencing consisting on seven feet of chain link fence topped by one foot (1') of barbed wire.

Purpose of Variance:

This application seeks approval of a variance to permit seven foot (7') tall chain link fences with one foot (1') of additional barbed wire around the Project as depicted by the site plan.

Background Information:

The fence will surround the perimeter of the solar energy system and substation to protect the facilities from inquisitive visitors and protect potential trespassers from inadvertent electrical shock.

VARIANCE REQUESTED

The location of proposed fencing is described above and illustrated by the site plan.

Critical Area Variance Criteria

Pursuant to Sections 155-20(A)(1)(b) and 155-50(A)(4)(c), fence heights are restricted to six feet (6') for side or rear yard fences and three and a half feet (3.5') for front yard fences, and the Board of Appeals is authorized to approve a variance waiving the maximum fence height provisions of the County Code. The variance hereby requested complies with all of the following criteria:

(a) Special conditions and circumstances exist which are peculiar to the land, structure or building involved such that a literal enforcement of the provisions of this chapter would result in unwarranted hardship.

Solar energy systems and substations are comprised of electric components that may pose a risk to individuals who are unfamiliar with, but come into contact with, the systems. While no risk is presented to individuals who do not contact the systems, some aspects of the Project will involve high voltage electricity that can cause serious bodily harm or death individuals not skilled and experienced working with the systems. Literal enforcement of the provisions of the County Code would restrict fence height around the Project in a manner that would provide insufficient protection to the expensive equipment on-site and to possible trespassers.

(b) Literal interpretation of the provisions of the Zoning Chapter of the County Code would deprive the Applicant of rights commonly enjoyed by other properties in the same district under the terms of the Zoning Chapter.

A literal interpretation of the requirements will deprive the Applicant of property rights commonly enjoyed by other property owners in the same zoning district. The Applicant desires to protect its Project and equipment while also deterring trespassers and visitors from putting themselves in a potentially dangerous situation. Other solar projects and substations within the County and around Maryland have been granted similar variances, allowing them to install fencing that was adequate to suit the needs of the sensitive and potentially dangerous electrical systems to which access must be limited.

(c) The variance requested is not based upon conditions or circumstances which are the result of actions by the Applicant.

The variance requested is based on the nature of the Project, but not based upon conditions or circumstances which are the result of actions by the Applicant. The variance is necessary to ensure that Applicant's Project and equipment are protected and that inquisitive visitors or unwanted trespassers are not put in danger of harm. The request does not relate to any condition or circumstances involving neighboring properties.

(d) Granting the variance requested will not confer upon the Applicant any special privilege that is denied by the Zoning Chapter of the County Code to other lands, structures or buildings in the same district.

The requested variance will not confer upon the Applicant any special privilege that would be denied to other owners of lands within the AC zoning district. Other property owners within the AC district have been granted variances permitting fence heights in excess of the six foot (6') restriction. Upon approval of the requested variance, the applicant will be permitted to make full use of the property as outlined herein.

Conclusion

For all of the foregoing reasons and based on additional testimony and evidence to be presented during the Board's hearing, the variance requested by this application should be approved.