ARTICLE XXIV - SOLAR ENERGY FACILITIES[107]

24-1. PURPOSE AND INTENT:

24-1.1 The purpose of this article is to provide for and regulate the siting, development, construction, installation, operation, and decommissioning of solar energy facilities in the Town of Wytheville in a manner that promotes economic development and the safe, effective, and efficient use of such facilities while protecting the health, safety, and welfare of the community and avoiding adverse impacts on Town resources.

24-1.2 The intent of this article is to encourage solar energy facilities in a manner that promotes the development of renewable energy sources while limiting impacts on natural resources, including pollinator and wildlife habitats, and existing agricultural, forestal, residential, commercial, industrial, historical, cultural, and recreational uses of property or the future development of such uses of property in the Town.

24-1.3 This article is not intended to abridge safety, health, environmental, or land use requirements contained in other applicable laws, codes, regulations, standards, or ordinances.

24-1.4 This article does not supersede or nullify any provision of local, state, or federal law that applies to solar energy facilities.

24-2. DEFINITIONS:

24-2.1 The following words, terms, and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

A. **Applicant:** The person or entity who submits an application to the Town for a zoning permit or special exception permit, as the case may be, to site, develop, construct, install, and operate a solar energy facility under this article.

B. **Facility Owner:** The person or entity that owns all or a portion of the solar energy facility, whether or not it owns the site on which the facility is located.

C. **Integrated PV:** Photovoltaics incorporated into building materials, such as shingles.

D. **Large Power Grid Scale Solar Energy Facility:** A renewable energy project that either: (1) generates electricity from sunlight, consisting of one or more PV systems and other appurtenant structures and facilities within the boundaries of the site, or (2) utilizes sunlight as an energy source to heat or cool buildings, heat,

or cool water, or produce mechanical power by means of any combination of collecting, transferring, or converting solar-generated energy. The term applies to, but is not limited to, solar photovoltaic systems, solar thermal systems, and solar hot water systems. The term excludes, however, facilities that meet any of the following criteria: (1) it has a project area equal to or less than one acre, (2) it has a rated capacity equal to or less than 200 kilowatts (kw), (3) it is mounted on or over a building, parking lot, or (4) it utilizes integrated PV only.

E. **Property Owner Scale Solar Collection System:** A system, accessory to a principal use, such as a residence or business, consisting of solar panels, modules, and related equipment (e.g., heat exchanger, pipes, inverter, wiring, storage) that collects solar radiation and transfers it as heat to a carrier fluid for use in water heating or space heating and cooling, or that collects solar energy and converts it into electricity. Property owner scale solar collection systems are designed to primarily meet on-site demands but may include the transfer of excess energy to an electric utility grid.

F. **Operator:** The person or entity responsible for the overall operation and management of the solar energy facility, if different than the facility owner.

G. **Photovoltaic or PV:** Materials and devices that absorb sunlight and convert it directly into electricity.

H. **Project Area:** The area within a site used for the construction and operation of the solar energy facility.

I. **Rated Capacity:** The maximum capacity of a solar energy facility based on the sum total of each photovoltaic system's nameplate capacity.

J. **Site:** The property containing a solar energy facility.

K. **Site Owner:** The person or entity that owns all or a portion of the site, if different than the facility owner.

L. **Small Power Grid Scale Solar Energy Facility:** A solar energy facility that: (1) has a project area of one acre or less; (2) has a rated capacity of 200 kw or less; (3) is mounted on or over a building, parking lot, or (4) utilizes integrated PV only.

24-3. APPLICABILITY AND PERMITTING:

24-3.1 The requirements set forth in this article shall govern the siting, development, construction, installation, operation, and decommissioning of solar energy facilities in the Town.

24-3.2 A special exception permit is required for each large power grid scale solar energy facility proposed to be constructed, installed, or operated in the Town.

24-3.3 A zoning permit is required for each small power grid scale solar energy facility proposed to be constructed, installed, or operated in the Town except where a special exception permit is required withing a specific zoning district.

24-3.4 Small power grid scale solar energy facilities are a permitted use in the A-1, B-1, B-2, MA-1, M-1, M-1M and M-2 Zoning Districts with a Zoning Permit. Facilities located in the B-2 DT Zoning District are permitted by special exception permit.

24-3.5 Large power grid scale solar energy facilities are a permitted use in the A-1, M-1, M-1M and M-2 Zoning Districts with a special exception Permit.

24-4. APPLICATIONS, PROCEDURES, AND REQUIREMENTS FOR PROPERTY OWNER SCALE SOLAR COLLECTION SYSTEMS:

24-4.1 Property owner scale solar collection systems are permitted in all zoning districts to serve any permitted use. (See Code of Virginia § 15.2-2288.7. Local regulation of solar facilities.)

24-4.2 A building permit is required for all property owner scale solar collection systems.

24-4.3 Integrated PV systems are encouraged for solar collection systems mounted on structures, especially for those in residential districts and for all roof mounted systems where a pitched roof is visible from the street.

24-4.4 Components may be mounted on the roof(s) of principal or accessory structures, other parts of structures, or the ground.

24-4.5 As part of the permit application, the applicant shall submit drawings prepared by a licensed engineer, which demonstrate how the solar collection system will be attached to the roof, the snow load capacity, and relevant construction details. A roof inspection report is also required prior to installation for all roof mounted systems to assure that the expected life of the roof will match or exceed the expected life of the solar collection system. The inspection may be performed by a certified home inspection professional, a licensed roofing contractor, or a registered engineer.

24-4.6 All solar panels, supporting structures, and other equipment must comply with the minimum setback and maximum height standards that apply to principal and accessory structures within the district where they are located.

24-4.7 Ground mounted systems shall be screened from view of adjoining streets. (See Article XVI, Section 20 for fencing and screening guidelines.)

24-4.8 Systems located within designated historic districts shall be screened from view using materials appropriate to the historic nature of the district or located in a manner that minimizes visual impact on historic structures or the character of the historic district. (See Article XVI, Section 20 for fencing and screening guidelines.)

24-4.9 Property owner scale solar collection systems are subject to all applicable building, electrical, and plumbing code requirements.

24-5. APPLICATIONS, PROCEDURES, AND REQUIREMENTS FOR SMALL POWER GRID SCALE SOLAR ENERGY FACILITIES:

24-5.1 For proposed small power grid scale solar energy facilities, the applicant shall submit a project narrative and site plan that comply with subsection A in section 24-6.1.

24-5.2 The signage, noise, and lighting requirements in section 24-7 shall apply to all small power grid scale solar energy facilities.

24-5.3 The fencing requirement and the height restriction in section 24-7 shall apply to all ground-mounted small power grid scale solar energy facilities except those that are mounted on or over a parking lot. Fencing requirements and height restrictions for small power grid scale solar energy facilities that are mounted on or over a parking lot, building, or structure are governed by the fencing guidelines for the zoning district where the facility is located (See Section 16-20).

24-5.4 For roof mounted systems, the applicant shall submit drawings prepared by a licensed engineer, architect, or other qualified professional, which demonstrate how the solar collection system will be attached to the roof, the snow load capacity, and relevant construction details. A roof inspection report is also required prior to installation for all roof mounted systems to assure that the expected life of the roof will match or exceed the expected life of the solar collection system. The inspection may be performed by a certified home inspection professional, a licensed roofing contractor, or a registered engineer.

24-5.5 The setback, lighting, vegetative buffering, and pollinator habitats requirements in section 24-7 shall apply to all small power grid scale solar energy facilities except those that are mounted on or over a building,

structure, or parking lot; or that utilize integrated PV only. The setback, lighting, buffer yard and landscaping requirements for small power grid scale solar energy facilities that are mounted on or over a parking lot, building, or structure shall conform to the guidelines for setbacks, lighting, buffer yards, and landscaping in the zoning district where the facility is located.

24-5.6 Small power grid scale solar energy facilities are required to have a decommissioning plan and security that comply with subsection D of section 24-6.

24-5.7 The zoning administrator may require additional information, including but not limited to a site plan and/or construction details, from the applicant to determine whether the facility meets these requirements and qualifies as a matter of right as a small power grid scale solar energy facility.

24-6. APPLICATIONS AND PROCEDURES FOR LARGE POWER GRID SCALE SOLAR ENERGY FACILITIES:

24-6.1 In addition to materials required for a special exception permit application under section 24-5, applications for large power grid scale solar energy facilities shall, unless otherwise provided herein, include the following information:

A. **Project Narrative:** A narrative identifying the applicant, facility owner, site owner, and operator, if known at the time of the application, and describing the proposed large power grid scale solar energy facility, including an overview of the project and its location; the size of the site and the project area; the current use of the site; the estimated time for construction and proposed date for commencement of operations; the planned maximum rated capacity of the facility; the approximate number, representative types and expected footprint of solar equipment to be constructed, including without limitation, photovoltaic panels; ancillary facilities, if applicable; and how and where the electricity generated at the facility will be transmitted, including the location of the proposed electrical grid interconnection.

B. **Site Plan:** The site plan shall include the following information:

(1) Property lines, minimum required setback lines under this article, and any proposed setback lines that exceed the minimum requirements.

(2) Existing and proposed buildings and structures, including preliminary location(s) of the proposed solar equipment.

(3) Existing and proposed access roads, permanent entrances, temporary construction entrances, drives, turnout locations, and parking, including written confirmation from the Virginia Department of Transportation ("VDOT") that all entrances satisfy applicable VDOT requirements; provided, however, these requirements shall not exceed VDOT requirements for other types of projects in the underlying zoning district.

(4) Proposed locations and maximum heights of substations, electrical cabling from the solar systems to the substations, panels, ancillary equipment and facilities, buildings, and structures (including those within any applicable setbacks).

(5) Fencing as required under this article and other methods of ensuring public safety.

(6) Areas where the vegetative buffering required in this article will be installed and maintained and areas where pollinator-friendly and wildlife-friendly native plants, shrubs, trees, grasses, forbs, and wildflowers required in this article will be installed and maintained.

(7) Existing wetlands, woodlands and areas containing substantial woods or dense vegetation.

(8) Additional information that may be necessary for a technical review of the proposal, may be required, as determined by the zoning administrator. The Planning Commission or Town Council may require other relevant information deemed to be necessary to evaluate the application.

C. **Documentation of Right to Use Property for the Proposed Facility:** Documentation shall include proof of control over the proposed site or possession of the right to use the proposed site in the manner requested. The applicant may redact sensitive financial or confidential information.

D. **Decommissioning Plan and Security:** The decommissioning plan shall include the following information:

(1) The applicant shall provide a detailed decommissioning plan that provides procedures and requirements for removal of all parts of the solar energy generation facility and its various structures at the end of the useful life of the facility or if it is deemed abandoned pursuant to section 24-8. The plan shall include the anticipated life of the facility, the estimated overall cost of decommissioning the facility in current dollars, the methodology for determining such estimate, and the manner in

which the project will be decommissioned. The decommissioning plan and the estimated decommissioning cost will be updated upon the request of the zoning administrator, provided the update shall be no more frequently than once every five years and no less frequently than once every ten years.

(2) Security: Pursuant to § 15.2-2241.2 of the Code of Virginia, prior to operation, the applicant must provide security in the amount of the estimated cost of the decommissioning. Options for security include a cash escrow, a performance surety bond, a certified check, an irrevocable letter of credit, or other security acceptable to the Town in an amount equal to the estimated decommissioning cost developed and updated in accordance with the decommissioning plan acceptable to the Town. The security must remain valid until the decommissioning obligations have been met. The security may be adjusted up or down by the Town if the estimated cost of decommissioning the facility changes. The security must be renewed or replaced if necessary to account for any changes in the total estimated overall decommissioning cost in accordance with the periodic updated estimates required by the decommissioning plan. Obtaining and maintaining the requisite security will be a mandatory condition of the special exception permit. The security shall be in favor of the Town and shall be obtained and delivered to the Town before any construction commences.

(3) The decommissioning plan, cost estimates, and all updates of those plans and estimates shall be sealed by a professional engineer.

E. **Landscaping and Screening Plan:** The applicant must submit a landscaping and screening plan that addresses the vegetative buffering required in this article, including the use of existing and newly installed vegetation to screen the facility. The plan also must address the use of pollinator-friendly and wildlife-friendly native plants, shrubs, trees, grasses, forbs, and wildflowers in the project area and in the setbacks and vegetative buffering as required in this article.

F. **Erosion and Sediment Control Plan:** An erosion and sediment control plan must be approved by the Town staff and when applicable, by the Virginia Department of Environmental Quality prior to any land disturbing activity.

G. **Stormwater Management Plan:** A stormwater management plan must be approved by the department of environmental quality prior to any land disturbing activity.

H. **Review Fees:** The Town may retain qualified third parties to review portions of a permit application that are outside the Town's areas of expertise and do not have adequate state and federal review. Any out-of-pocket costs incurred by the Town for such review by qualified third parties shall be paid by applicant. The third-party reviewers and their estimated costs will be submitted to applicant for approval before the costs are incurred. The Town may, in the alternative, accept such review by qualified third parties selected, retained, and paid by the applicant.

I. **Exemptions:** The zoning administrator may exempt applications for facilities smaller than four acres with a rated capacity equal to or less than one megawatt (MW) from some of the requirements of this section provided, however, the zoning administrator may not exempt applications from any of the requirements included in section 24-5.

J. **Post-Application Documentation and Approvals:** All documentation required to be submitted to and approvals required from the Town after the issuance of the permit shall, unless otherwise stated in the conditions attached to the special exception permit, be submitted, or obtained no later than the date of any application for a building permit for the facility. The failure or refusal to submit required documentation or obtain required approvals following the issuance of a special exception permit shall result in the suspension of the special exception permit and the denial of the building permit.

24-7. LOCATION, APPEARANCE, AND OPERATIONAL REQUIREMENTS:

24-7.1 The following requirements apply to large power grid scale solar energy facilities:

A. **Visual Impacts:** The applicant shall demonstrate through project siting and proposed mitigation, if necessary, that the solar project minimizes impacts on viewsheds, including from residential areas and areas of scenic, historical, cultural, archaeological, and recreational significance. The facility shall utilize only panels that employ anti-glare technology, anti-reflective coatings, and other available mitigation techniques, all that meet or exceed industry standards, to reduce glint and glare. The applicant shall provide written certification from a qualified expert acceptable to the Town that the facility's panels incorporate and utilize anti-glare technology

and anti-reflective coatings and reduce glint and glare to levels that meet or exceed industry standards.

B. **Signage:** All signage on the site shall comply with the Town sign ordinance, as adopted and from time to time amended.

C. **Noise:** Noise levels from the facility shall comply at all times with the Town noise ordinance, as adopted and from time to time amended.

D. **Setbacks:** The project area shall be set back a distance of at least 75 feet from all public rights-of-way and main buildings on adjoining parcels, and a distance of at least 25 feet from adjacent property lines. Exceptions may be made for adjoining parcels that are owned by the applicant. Increased setbacks up to 100 feet and additional buffering may be included in the conditions for a particular permit. Solar energy facilities also shall meet all setback requirements for primary structures for the zoning district in which the facility is located in addition to the requirements set forth above. Access, erosion and stormwater structures, and interconnection to the electrical grid may be made through setback areas provided that such electrical grid connections are generally perpendicular to the property line.

E. **Fencing:** The project area shall be enclosed by security fencing not less than six feet in height and equipped with an appropriate anticlimbing device such as strands of barbed wire on top of the fence. The height and/or location of the fence may be altered in the conditions for a particular permit. Fencing must be installed on the interior of the vegetative buffer required in this section so that it is screened from the ground level view of adjacent property owners. The fencing shall be maintained at all times while the facility is in operation.

F. **Vegetative Buffer:** A vegetated buffer sufficient to mitigate the visual impact of the facility is required. The buffer shall consist of a landscaped strip at least 15 feet wide, shall be located within the setbacks required under subsection D above, and shall run around the entire perimeter of the property. The buffer shall consist of existing vegetation and, if deemed necessary for the issuance of a special exception permit, an installed landscaped strip consisting of multiple rows of staggered trees and other vegetation. This buffer should be made up of plant materials at least three feet tall at the time of planting and that are reasonably expected to grow to a minimum height of eight feet within three years. The Planning Commission or Town Council may require increased setbacks and additional or taller vegetative buffering in situations where the

height of structures or the topography affects the visual impact of the facility. Non-invasive plant species and pollinator-friendly and wildlife-friendly native plants, shrubs, trees, grasses, forbs, and wildflowers must be used in the vegetative buffer. Fencing must be installed on the interior of the buffer. A recommendation that the screening and/or buffer creation requirements be waived or altered may be made by the Planning Commission when the applicant proposes to use existing wetlands or woodlands, as long as the wetlands or woodlands are permanently protected for use as a buffer. Existing trees and vegetation may be maintained within such buffer areas except where dead, diseased or as necessary for development or to promote healthy growth, and such trees and vegetation may supplement or satisfy landscaping requirements as applicable. If existing trees and vegetation are disturbed or are not present, new plantings shall be provided for the buffer. The buffer shall be maintained for the life of the facility.

G. **Height:** Ground-mounted solar energy generation facilities shall not exceed a height of 20 feet, which shall be measured from the highest natural grade below each solar panel. This limit shall not apply to utility poles and the interconnection to the overhead electric utility grid.

H. **Lighting:** Lighting shall be limited to the minimum reasonably necessary for security purposes and shall be designed to minimize off-site effects. Lighting on the site shall comply with any dark skies ordinance the Town Council may adopt or, from time to time, amend.

I. **Location:** Large power grid scale solar energy facilities shall not be located within one mile of an airport, helipad, or heliport unless the applicant submits, as part of its application, written certification from the Federal Aviation Administration that the location of the facility poses no hazard for, and will not interfere with, airport operations.

J. **Entry and Inspection:** The facility and site owners and/or operator will allow designated Town officials access to the facility for inspection purposes, provided such inspectors will be subject to the facility and site owners' and/or operator's safety requirements and protocols while within the facility.

24-8. DECOMMISSIONING OF UNSAFE OR ABANDONED PROJECTS:

24-8.1 If a solar energy facility has been determined to be unsafe by the Town building official, the facility shall be required to be repaired by the facility owner, site owner, or operator to meet federal, state, and local safety standards, or to be removed by the owners or operator. The owners or

operator must complete the repair or removal of the facility, as directed by the building official, within the time period allowed by the building official. If directed to do so by the building official, the owners or operator will remove the solar energy facility in compliance with decommissioning plan established for such facility.

24-8.2 If any solar energy generation facility is not operated for a continuous period of 12 months, the Town may notify the facility owner by registered mail and provide 45 days for a response. In its response, the facility owner shall set forth reasons for the operational difficulty and provide a reasonable timetable for corrective action. If the Town deems the timetable for corrective action to be unreasonable, it may notify the facility owner, and the facility owner, site owner, or operator shall remove the solar energy facility in compliance with decommissioning plan established for such facility.

24-8.3 At such time that a solar energy facility is scheduled to be abandoned, the facility owner, site owner, or operator shall notify the zoning administrator in writing.

24-8.4 Within 365 days of the date of abandonment, whether as declared by the Town under subsection 24-8.2 or as scheduled by the owners or operator under subsection 24-8.3, the facility owner, site owner, or operator shall complete the physical removal of the solar energy facility in compliance with decommissioning plan established for such facility. This period may be extended at the request of the owners or operator, upon approval of the Town Council.

24-8.5 When the facility owner, site owner, operator, or other responsible party decommissions a solar energy facility, he shall handle and dispose of the equipment and other facility components in conformance with federal, state, and local requirements. All equipment, both above and below ground, must be removed as part of the decommissioning plan. Internal paths, roads, travelways, and landscaping may be left at the discretion of the site owner.

24-8.6 If the facility owner, site owner, or operator fails to timely remove or repair an unsafe or abandoned solar energy facility after written notice, the Town may pursue a legal action to have the facility removed at the expense of the facility owner, site owner, or operator, each of whom shall be jointly and severally liable for the expense of removing or repairing the facility. The Town also may call upon the decommissioning security to remove the facility.

24-9. FEDERAL, STATE, AND LOCAL REQUIREMENTS:

24-9.1 Compliance with uniform statewide building code. All solar energy facilities shall be constructed and operated in compliance with the uniform statewide building code.

24-9.2 Compliance with National Electric Code. All solar energy facilities shall be constructed and operated in compliance with the National Electric Code.

24-9.3 Compliance with regulations governing electric energy supply. Large power grid scale solar energy facilities connected to the utility grid must comply with permitting requirements of the state corporation commission or the permit by rule requirements of the department of environmental quality, as applicable.

24-9.4 FAA regulations. All solar energy facilities must meet or exceed the standards and regulations of the Federal Aviation Administration.

24-9.5 Other applicable laws. All solar energy facilities shall be constructed and operated in compliance with all applicable local, state, and federal laws, rules, regulations, permit requirements, and ordinances.

24-10. REVENUE SHARE ORDINANCE:

24-10.1 In accordance with the Code of Virginia § 58.1-2636 the town reserves the right to enact a solar revenue share ordinance for all solar projects over five megawatts in rated alternating current capacity and/or other applicable projects as stated in this section. Project developers shall notify the zoning administrator of any proposed projects that plans to meet or exceed the rated capacity criteria.

24-11. SOLAR SITING AGREEMENTS:

24-11.1 In accordance with the Code of Virginia § 15.2-2316.6 through 9, any solar project developer for projects over five megawatts in rated alternating current capacity shall contact the Zoning Administrator regarding the need for a solar siting agreement, prior to submitting a development or site plan application to the Town.

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