

# Department of Planning & Community Development



DATE: 06/25/21

TO: FRANKLIN COUNTY PLANNING COMMISSION

FROM: TIMOTHY MACK, SENIOR PLANNER

**RE: DRAFT SOLAR ORDINANCE WORKSHOP**

Dear Planning Commissioners,

The following packet contains materials for our upcoming draft solar ordinance workshop. It includes:

- An agenda for next Tuesday's (6/29/21) workshop; an
- Updated version of the draft solar ordinance, including suggested modifications previously discussed at our 6/8/21 Planning Commission hearing; and a
- Chart serving as a comparative aide between the current draft solar ordinance and the PAS Report

Please review at your convenience. As noted, the workshop will be held on **Tuesday, June 29<sup>th</sup>**, **at 5PM in Conference Room B-75.**

Franklin County Staff and Administration are deeply appreciative of your commitment to the development of this ordinance.

Respectfully,

Timothy Mack  
Senior Planner | Development Services

Franklin County Planning Commission  
Workshop Agenda  
June 29, 2021

I. Call Workshop to Order

II. Review of Draft Solar Ordinance and Packet Materials:

a. Discussion

b. Next Steps

III. Adjourn

# FRANKLIN COUNTY, VIRGINIA SOLAR ORDINANCE\_DRAFT JUNE 25, 2021

## DIVISION 3. – DEFINITIONS

### Sec. 25-40. – Principal definitions of the Zoning Ordinance

**Solar Generation Facility, Agricultural.** A solar generating facility that:

- (1) Has a generating capacity of not more than 1.5 megawatts and does not exceed 150% of the site’s expected annual energy consumption based on the previous 12 months of billing history or an annualized calculation of billing history if 12 months of billing history is not available;
- (2) Is located on the same site that is used for the calculation under criterion (1);
- (3) Is located on the site and is interconnected with its utility through a separate meter;
- (4) Is interconnected and operated in parallel with an electric utility’s distribution but not transmission facilities;
- (5) Is designed so that the electricity generated by the facility is expected to remain on the utility’s distribution system; and
- (6) Is a qualifying small power production facility pursuant to the Public Utility Regulatory Policies Act of 1978.

For the purposes of this definition, the term “utility” means a supplier or distributor, as applicable, and the term “site” means one or more parcels under common use, ownership, and control.

**Solar Generation Facility, Small:** A solar power or thermal energy generation facility that serves the electricity or thermal needs of the property upon which such facilities are located, and/or adjacent parcels under common use, ownership, and control.

**Solar Generation Facility, Utility-Scale:** A renewable energy project that generates electricity from sunlight, consisting of one or more photovoltaic systems and other appurtenant structures and facilities within the boundaries of the site, and is designed to interconnect with the electrical grid and/or to serve facilities that are not adjacent or under common use, ownership, or control.

## ARTICLE II. BASIC REGULATIONS

### DIVISION 4. – SUPPLEMENTARY REGULATIONS

#### Sec. 25-147. – Application.

Application requirements for Special Use Permit for Solar Generation Facility, Utility-Scale.

An application for a utility-scale solar generation facility shall contain:

- A. Project narrative. A narrative identifying the applicant, facility owner, site owner, and operator, if known at the time of application, and describing the proposed utility scale solar generation 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 photovoltaic panels; ancillary facilities, if applicable; how and where the electricity generated at the facility will be transmitted, including the location of the proposed electric grid interconnection; and a statement to address the following:
- I. Why the applicant believes the proposal will not be of substantial detriment to the adjacent property;
  - II. Why the applicant believes that the character of the zoning district will not be changed by the proposed action; and
  - III. How the proposal will be in harmony with the purpose and intent of Chapter 25 of the Franklin County Code, with the uses permitted by-right in the corresponding zoning district, with additional regulations provided in sections 25-111 through 25-137, supplementary regulations, and amendments of this chapter, and with the public health, safety and general welfare, and with the Franklin County Comprehensive Plan.

B. Concept plan. The concept plan shall include the following information:

1. Property lines, minimum required buffer areas, and any proposed buffer areas and setback lines that exceed the minimum requirements.
2. An area map showing the proposed site within a five-mile radius, together with prominent landmarks and physical features.
3. Existing and proposed buildings structures and other improvements, including location(s) of the proposed solar equipment.
4. Existing and proposed access roads, permanent entrances, temporary construction entrances, drives, turnout locations, cemetery access and parking, including written confirmation from the Virginia Department of Transportation (VDOT) that all entrances satisfy applicable VDOT requirements.
5. 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 buffers or setbacks).
6. Methods of ensuring public safety.
7. Areas where the vegetative buffering will be installed and maintained and areas where pollinator-friendly and wildlife-friendly native plants, shrubs, trees, grasses, forbs, and wildflowers will be installed and maintained following Virginia Pollinator-Smart Program best practices.
8. Existing wetlands, woodlands and areas containing substantial woods or vegetation.

9. Identification of recently cultivated lands and predominant soil types (based on publicly available data) of those lands.
10. Identification of any parcels located in or immediately adjacent to a designated growth area as shown in the most recently adopted Comprehensive Plan.
11. Identification of any parcels located in or immediately adjacent to an Agricultural district.
12. Additional information may be required, as determined by the zoning administrator, such as a scaled elevation view and other supporting drawings, photographs of the proposed site, photo or other realistic simulations or modeling of the proposed solar energy project from potentially sensitive locations as deemed necessary by the zoning administrator to assess the visual impact of the project, aerial image or map of the site, and additional information that may be necessary for a technical review of the proposal. The planning commission or board of supervisors may also require other relevant information deemed to be necessary to evaluate the application.

C. Landscaping and screening plan. The applicant must submit a landscaping and screening plan, 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-following Virginia Pollinator-Smart Program best practices.

D. Environmental and cultural resources review. The following documents shall also be submitted:

1. Virginia Cultural Resource Information System report. A report by the Virginia Department of Historic Resources Virginia Cultural Resource Information System must be submitted to identify historical, architectural, archeological, or other cultural resources on or near the proposed facility.
2. Cultural resources report. A copy of the cultural resources review conducted in conjunction with the state Department of Historic Resources for the Department of Environmental Quality permit by rule process This report shall be in addition to the report required in subsection a above and shall further identify historical, architectural, archeological, or other cultural resources on or abutting the proposed site.
3. A report on the potential impacts on wildlife and wildlife habitats at the site and within a two-mile radius of the proposed facility using information provided by the Department of Game and Inland Fisheries or a report prepared by a qualified third-party.
4. A report on potential impacts on pollinators and pollinator habitats at the site, including but not necessarily limited to the submission of a completed solar site pollinator habitat assessment as required by the zoning administrator.
5. A glint and glare study that demonstrates that the panels will be sited, designed, and installed to eliminate glint and glare effects on roadway users, nearby residences, commercial areas, and other sensitive viewing locations. The study will assess and quantify potential glint and glare effects and address the potential health, safety, and visual impacts associated with glint and

glare. Any such assessment must be conducted by qualified individuals using appropriate and commonly accepted software and procedures.

Sec. 25-148. - Performance standards for Solar Generation Facility, Small.

(A) Located on structures that shall comply with all provisions of the Uniform Statewide Building Code.

(B) Shall comply with generally accepted national environmental protection and product safety standards for the use of solar panels and battery technologies for solar photovoltaic (electric energy) projects, such as those developed for existing product certifications and standards including the National Sanitation Foundation/American National Standards Institute No. 457, International Electro technical Commission No. 61215-2, Institute of Electrical and Electronics Engineers Standard 1547, and Underwriters Laboratories No. 61730-2. A site development plan or building permit application shall refer to the specific safety and environmental standards complied with.

(C) The provisions of this section may be varied or modified as part of a master plan or proffered condition.

Sec. 25-149. – Processing and performance standards for Solar Generation Facility, Utility-Scale.

(A) Community meeting. A public meeting shall be held prior to the public hearing with the planning commission to give the community an opportunity to hear from the applicant and ask questions regarding the proposed facility. The meeting shall be held under the following guidelines:

(1) The applicant shall inform the zoning administrator and adjacent property owners in writing of the date, time and location of the meeting, at least seven but no more than 14 days in advance of the meeting.

(2) The date, time and location of the meeting shall be advertised in a newspaper of record in the county by the applicant, at least seven but no more than 14 days, in advance of the meeting date.

(3) The meeting shall be held within the county, at a location open to the public with adequate parking and seating facilities that will accommodate persons with disabilities.

(4) The meeting shall give members of the public the opportunity to review application materials, ask questions of the applicant and provide feedback.

(5) The applicant shall provide to the zoning administrator a summary of any input received from members of the public at the meeting.

(B) Performance requirements. The application shall comply with the following criteria:

(1) Visual impacts. The applicant shall demonstrate through project siting and proposed mitigation, if necessary, that the solar project minimizes impacts on view sheds, including from residential areas and areas of scenic, historical, cultural, archeological, and recreational significance. The facility shall utilize only panels that employ anti-glare technology, antireflective 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 county that the facility's panels incorporate and utilize antiglare technology and anti-reflective coatings and reduce glint and glare to levels that meet or exceed industry standards.

(2) National standards. Projects shall comply with generally accepted national environmental protection and product safety standards for the use of solar panels and battery technologies for solar photovoltaic (electric energy) projects, such as those developed for existing product certifications and standards including the National Sanitation Foundation/American National Standards Institute No. 457, International Electro technical Commission No. 61215-2, Institute of Electrical and Electronics Engineers Standard 1547, and Underwriters Laboratories No. 61730-2. A site development plan shall refer to the specific safety and environmental standards being met.

(3) Setbacks. The project area shall be set back a distance of at least 150 feet from all public rights-of-way and main buildings on adjoining parcels, and from adjacent property lines. Exceptions to this distance may be made for adjoining parcels owned by the applicant. Increased setbacks over 150 feet and additional buffering may be included in the conditions for a particular permit. Access, erosion and stormwater structures, and interconnection to the electrical grid may be made through setback areas provided that such are generally perpendicular to the property line or underground.

(4) Fencing. The project area shall be enclosed by security fencing not less than six feet in height and equipped with 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 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.

(5) Vegetative buffer. A vegetative buffer sufficient to mitigate the visual impact of the facility is required. The buffer shall consist of a landscaping strip at least 15 feet wide, shall be located within the setbacks required under sub-subsection (3) 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 use 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 Board of Supervisors may require increased setbacks and additional or taller vegetative buffering in situations where the height of structures or 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 following Virginia

Pollinator-Smart Program best practices. 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 and approved by the Zoning Administrator. If existing trees and vegetation are disturbed, new plantings shall be provided for the buffer at least 3-foot tall. The buffer shall be maintained for the life of the facility.

(6) Pollinator habitats. The project area will be seeded promptly with winter rye or white clover following completion of construction in such a manner as to reduce invasive weed growth and trap sediment within the project area. At the beginning of the next planting season the project area, setbacks and buffers will be overseeded with appropriate pollinator-friendly native plants, shrubs, trees, grasses, forbs and wildflowers following Virginia Pollinator-Smart Program best practices. Once these pollinator habits are established, they are to be mowed after the end of every migratory season to reseed these areas.

(7) 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 that meet State Corporation Commission requirements.

(8) 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 be dark sky compliant.

(9) Density; location. Solar Farms shall not be located within one mile of an airport 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.

(C) Considerations. In issuing any special use permit for a Solar Generation Facility, Utility-Scale, the Board of Supervisors may waive any of the requirements of subsection (B) above and shall consider the following matters, in addition to those otherwise provided, in the adoption of the special use permit:

(1) The topography of the site and the surrounding area.

(2) The proximity of the site to, observability from, and impact on agricultural, rural and residential areas.

(3) The proximity of the site to, observability from, and impact on areas of historical, cultural, and archaeological significance including cemeteries.

(4) The proximity of the site to other large scale solar energy facilities, other energy generating facilities, and utility transmission lines.



- (5) The proximity of the site to, observability from, and impact on areas of scenic significance, such as scenic byways, vistas, and blueways.
- (6) The proximity of the site to, observability from, and impact on public rights-of-way, including, but not limited to, highways, secondary roads, streets, and scenic byways.
- (7) The proximity of the site to, observability from, and impact on recreational areas, such as nationally protected parks, forests and historic sites, battlefields, trails, lakes, rivers, and creeks.
- (8) The proximity of the site to designated growth areas.
- (9) The proximity of the site to airports.
- (10) The preservation and protection of wildlife and pollinator habitats and corridors.
- (11) The proximity of the site to any rural planning area or community planning area identified in the comprehensive plan.
- (12) The size of the site.
- (13) The proposed use of available technology, coatings, and other measures for mitigating adverse impacts of the facility.
- (14) The preservation and protection of prime farmland in the county.
- (15) Such other matters as the planning commission or the board of supervisors may deem reasonably related to the application or its impacts.

(D) Conditions. The Board of Supervisors may impose conditions reasonably designed to mitigate the impacts of the facility. Such conditions may include requirements for (1) dedication of real property of substantial value to the county or one of its instrumentalities, or (2) substantial cash payments for or construction of substantial public improvements, the need for which is not generated solely by the granting of the conditional use permit, so long as such conditions are reasonably related to the project.

#### Sec. 25-150. - Site Development Plan

Purpose, types, and, when required, exceptions.

(A) Types and when required. Either an administrative, minor, or major site development plan (site plan) shall be required for any construction, or a condition use if requires as a specific condition in all zoning districts. All Solar Farms shall require a site development plan and all other documentation and approvals required by law, including those provided for in any conditional use permit and in the Department of Environmental Quality permit by rule process prior to issuance of a building permit.

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#### Sec. 25-151. - Decommissioning of Solar Generation Facility, Utility-Scale.

(A) As used in this section, unless the context requires a different meaning: Decommission means the removal and proper disposal of solar energy equipment, facilities, or devices related to a Solar Farm. The term includes the reasonable restoration of the real property, including (1) soil stabilization and (2) revegetation of the ground cover of the real property disturbed by the installation of such equipment, facilities, or devices. Solar energy equipment, facilities, or devices means any personal property designed and used primarily for the purpose of collecting, generating, or transferring electric energy from sunlight.

(B) A site development plan for a Solar Generation Facility, Utility-Scale shall include 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. 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 or as provided in the agreement.

(C) As a condition of the approval of a site development plan, the owner, lessee, or developer of the project (the "responsible party") shall enter into a written project development agreement with the County, setting forth, at a minimum, that (1) if the facility ceases generating electricity for more than 12 consecutive months, the responsible party will provide for its decommissioning; (2) if the owner, lessee, or developer defaults in the obligation to decommission the facility, the county has the right to enter the real property without further need of consent of the owner to engage in decommissioning; and (3) the responsible party provides financial assurance of such performance to the County in the form of certified funds, cash escrow, bond, letter of credit, or parent guarantee as approved by the County Attorney . The amount of the financial assurance shall be based upon an estimate by a professional engineer licensed in the Commonwealth, who is engaged by the responsible party, who has experience in preparing decommissioning estimates and is approved by the county. The estimate shall not exceed the total of the projected cost of decommissioning, which may include the net salvage value of such equipment, facilities, or devices, plus a reasonable allowance for estimated administrative costs related to a default of the owner, lessee, or developer, and an annual inflation factor.

...

The following will be incorporated into the ordinance:

**Solar facilities are proposed to be permitted as follows:**

	A-1	RE	R-1	R-2	RC-1	RMF	RPD	B-1	B-2	M-1	M-2	PCD	REP
<b>Solar Generation Facility, Small</b>	S	S	S	S	S	S	S	S	S	S	S	S	S
<b>Solar Generation Facility, Utility-Scale</b>	SUP								SUP	SUP	SUP	SUP	SUP

**S:** Permitted with Supplementary Regulations

**SUP:** Special Use Permit approved by Board of County Supervisors required

A blank cell indicates districts where solar facilities would not be permitted.

FRANKLIN COUNTY SOLAR DRAFT ORDINANCE | PLANNING ADVISORY SERVICE (PAS) REPORT

Franklin County Solar Draft Ordinance	PAS Report	Covered	Deviations	Solution(s)
<b>Application</b>	<b>Application</b>	Sec. 25-147. – Application	Wording only	None
<b>Concept Plan</b>	<b>Concept Plan</b>	Sec. 25-147. – Application, (B) Concept Plan	Wording only	None
<b>Public Notice</b>	<b>Public Notice</b>	Sec. 25-149.- Processing and performance standards for Solar Generation Facility, Utility-Scale, (A) Community meeting, and (B) Performance requirements	Same content is covered in in both meeting requirements and performance standards - with only minor differences	Consider adding design standards to ensure facility will blend into setting; max height for accessory buildings; ground cover and vegetation be native to area (add to (B) Performance requirements)
<b>Performance Standards/Requirements</b>	<b>Development Standards</b>	Sec. 25-148, and Sec. 25-149	Wording only	Consider adding a repair deadline for unsafe equipment (30 days); on-site emergency plan
<b>Considerations</b>	<b>None</b>	Sec. 25-149	PAS has no specific “Considerations” component, but a lot of their criteria falls under other areas	None
<b>Site Development Plan</b>	<b>Site Development Plan</b>	Sec. 25-150. – Site Development Plan	Subject to specific zoning (Franklin County) ordinance	None
<b>None</b>	<b>Construction Management Plan</b>	None	PAS suggests requiring a Construction Management Plan	Consider adding CMP to Sec. 25-150. – Site Development Plan
<b>Decommissioning</b>	<b>Decommissioning</b>	Sec. 25-151	Wording only	None

- *Covered: The Franklin County Solar Draft Ordinance addresses the same issues in the PAS report*
- *Deviations: Areas in PAS Report that aren’t specifically addressed in Franklin County Solar Draft Ordinance*
- *“Wording only”: The language in Franklin County Solar Draft Ordinance is different, but the content is the same*
- *Solution(s): Suggested additions to Solar Draft Ordinance based on Deviations from*