



AGENDA
Page County Planning Commission
Special Meeting
Board of Supervisors Room- County Government Center
103 South Court Street, Luray, VA 22835
March 5, 2020- 7:00 p.m.

Call to Order

- A. Pledge of Allegiance
- B. Moment of Silence

Adoption of Agenda

Unfinished Business

- A. Review and discussion of the draft solar ordinance regulations prepared by the Berkley Group

Adjourn

ARTICLE 10

(new article)

SOLAR FACILITIES

Sec. 125-70 Statement of intent

The purpose of this section is to establish requirements for construction and operation of solar facilities and to provide standards for the placement, design, construction, monitoring, modification, and removal of solar facilities; address public safety, minimize impacts on scenic, natural, and historic resources; and provide adequate financial assurance for decommissioning.

Sec. 125-71 Applicability

This article shall apply to all solar facilities constructed after the effective date of this article, including any physical modifications to any existing solar facilities that materially alter the type, configuration, or size of such facilities or other equipment.

Sec. 125-72 Zoning districts

- (a) Small-scale solar facilities may be installed by-right in all zoning districts to provide electricity to individual structures; provided a site plan (as applicable) has been submitted to Page County for review and approval; all Federal, State and Local regulations have been followed; and the system is located upon the property or structure being served.
- (b) Medium-scale solar facilities may be installed by-right in commercial and industrial zoning districts to provide electricity to individual structures; provided a site plan (as applicable) has been submitted to Page County for review and approval; all Federal, State and Local regulations have been followed; and the system is located upon the property or structure being served.
- (c) Any commercial or industrial solar facility installed upon a roof top shall submit a site plan and an engineering study to Page County for review.
- (d) Utility-scale solar facilities shall be permitted by Special Use Permit (SUP) only in the A-1 zoning district.
- (e) Utility-scale solar facilities should locate on brownfields or near existing industrial uses, where feasible.

The subcommittee's recommendation to the full Commission is to strike or consider striking:

in 125-72 d "in the A-1 zoning district"

all of 125-72 e

Sec. 125-73 Applications and procedures

In addition to other requirements of the Page County Zoning Ordinance and Special Use Permit requirements, applications for a utility-scale solar facility shall include the following information:

- (a) Pre-application meeting. Schedule a pre-application meeting with Page County to discuss the location, scale, and nature of the proposed use and what will be expected during that process.
- (b) Comprehensive Plan Review. A 2232 review by the County is required by the *Code of Virginia* (§15.2-2232) for utility-scale solar facilities. This Code provision provides for a review by the Planning Commission of public utility facility proposals to determine if their general or approximate location, character and extent are substantially in accord with the Comprehensive Plan or part thereof.
- (c) Special Use Permit (SUP) application. A complete SUP application including:
 - 1. Documents demonstrating the ownership of the subject parcel(s).
 - 2. Proof that the applicant has authorization to act upon the owner's behalf.
 - 3. Identification of the intended utility company who will interconnect to the facility.
 - 4. List of all adjacent property owners, their tax map numbers, and addresses.
 - 5. A description of the current use and physical characteristics of the subject parcels.
 - 6. A description of the existing uses of nearby properties.
 - 7. A narrative identifying the applicant, owner or operator, and describing the proposed solar facility project, including an overview of the project and its location, approximate rated capacity of the solar facility project, the approximate number of panels, representative types, expected footprint of solar equipment to be constructed, and type and location of interconnection to electrical grid.
 - 8. Aerial imagery which shows the proposed location of the solar facility, fenced area, driveways, and interconnection to electrical grid with the closest distance to all adjacent property lines and dwellings along with main points of ingress/egress.
 - 9. Payment of the application fee and any additional review costs, advertising, or other required staff time.
- (d) Concept plan. A concept plan prepared by an engineer with a professional engineering license in the Commonwealth of Virginia, that shall include the following:
 - 1. A description of the subject parcels.
 - 2. Property lines and setback lines.
 - 3. Existing and proposed buildings and structures; including preliminary locations of the proposed solar panels and related equipment; the location of proposed fencing, driveways, internal roads, and structures; and the location of points of ingress/egress.
 - 4. The location and nature of proposed buffers and screening elements, including vegetative and constructed buffers.
 - 5. A grading plan.
 - 6. A landscaping maintenance plan.
 - 7. Existing and proposed access roads, drives, turnout locations, and parking.
 - 8. Location of substations, electrical cabling from the solar facility systems to the substations, ancillary equipment, buildings, and structures including those within any applicable setback.
 - 9. Fencing or other methods of ensuring public safety.
 - 10. Twenty sets (11"× 17" or larger), one reduced copy (8½"× 11") and one electronic copy of the concept plan, including elevations and landscape plans as required.
 - 11. Provide an inventory of all solar facilities – existing or proposed – within a four (4) mile radius.

12. Additional information may be required as determined by Page County such as a scaled elevation view of the property and other supporting drawings, photographs of the proposed site, photo or other realistic simulations or modeling of the proposed project from potentially sensitive locations as deemed necessary by Page County to assess the visual impact of the project, landscaping and screening plan, coverage map, and additional information that may be necessary for a technical review of the proposal.
- (e) Concept plan compliance. The facility shall be constructed and operated in substantial compliance with the approved Concept Plan, with allowances for changes required by the Virginia Department of Environmental Quality (DEQ) Permit by Rule (PBR) process.
- (f) Decommissioning plan. A detailed decommissioning plan, certified by an engineer, which shall include the following:
 1. The anticipated life of the project;
 2. The estimated decommissioning cost in current dollars;
 3. How the estimate was determined;
 4. The method of ensuring that funds will be available for decommissioning and removal;
 5. The method that the estimated decommissioning cost will be kept current; and
 6. The manner in which the project will be decommissioned and the site restored.

The applicant shall provide a cost estimate for the decommissioning of the facility that shall be prepared by a professional engineer or contractor who has expertise in the removal of the solar facility. The decommissioning cost estimate shall explicitly detail the cost and shall include a mechanism for calculating increased removal costs due to inflation and without any reduction for salvage value. This cost estimate shall be recalculated every five (5) years and the surety shall be updated accordingly.

- (g) A proposed method of providing appropriate escrow, surety or security for the cost of the decommissioning plan.
- (h) Traffic study submitted with application modelling the construction and decommissioning processes. County staff will review the study in cooperation with VDOT.
- (i) An estimated construction schedule.
- (j) Wetlands, waterways, and floodplains shall be inventoried, delineated, and avoided.
- (k) Environmental inventory and impact statement regarding any site and viewshed impacts, including direct and indirect impacts to national and state forests, national or state parks, wildlife management areas, conservation easements, recreational areas, or any known historic or cultural resources within three (3) miles of the proposed project.
- (l) A visual impact analysis demonstrating project siting and proposed mitigation, if necessary, so that the solar facility minimizes impact on the visual character of the County.
 1. The applicant shall provide accurate, to scale, photographic simulations showing the relationship of the solar facility and its associated amenities and development to its surroundings. The photographic simulations shall show such views of solar structures from

locations such as property lines and roadways, as deemed necessary by the County in order to assess the visual impact of the solar facility.

2. The total number of simulations and the perspectives from which they are prepared shall be established by Page County after the pre-application meeting.

Sec. 125-74 Neighborhood meeting

- (a) 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 project.

The subcommittee recommends a change to (a) A public meeting organized and hosted by the applicant shall be held prior to the Planning Commission Public Hearing to....

1. The applicant shall inform Page County 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 date.
2. The date, time and location of the meeting shall be advertised in the County's newspaper of record 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 general public with adequate parking and seating facilities which may 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 Page County summary of any input received from members of the public at the meeting.

Sec. 125-75 Minimum development standards

- (a) Location standards for utility-scale solar facilities. The location standards stated below for utility-scale solar facilities are intended to mitigate the adverse effects of such uses on adjoining property owners, the area, and the County.

1. The minimum area of a utility-scale solar facility shall be 2 acres, and the maximum area shall be less than 500 acres, including the required open space.

The subcommittee requested that the full Commission be made aware that the consultant states that the 500 Acre maximum was suggested based on a specific electrical watt/volt production value.

The subcommittee's recommendation is to require a list of what is included within the maximum area.

2. The equipment, improvements, structures, and percent of acreage coverage of a utility-scale solar facility shall be shown on the approved concept plan and site plan. The percent of acreage coverage shall not exceed 65%.

The subcommittee recommends the removal of percent of the acreage coverage %.

3. Utility-scale solar facilities shall be located outside identified planning areas.
4. Utility-scale solar facilities shall be located outside forested areas to preserve forest resources;
5. Utility-scale solar facilities shall minimize and avoid locating on farmland with soils

categorized as Prime Farmland and Farmland of Statewide Importance.

6. Utility-scale solar facility shall be located at least one (1) mile from a town boundary.
 7. Utility-scale solar facilities shall not be located within the Primary or Secondary Service Areas around a town or adjacent to residential districts or subdivisions.
 8. No utility-scale solar facility shall be located within two (2) miles of another existing or permitted utility-scale solar facility unless the combined acreage coverage is less than 500 acres.
 9. Utility-scale solar facilities shall be within one (1) mile of electric transmission lines.
 10. Utility-scale solar facilities shall not be proximate to residences; historic, cultural, recreational, or environmentally-sensitive areas; and scenic viewsheds.
- (b) A utility-scale solar facility shall be constructed and maintained in substantial compliance with the approved concept plan.
- (c) The minimum setback to property lines of parcels with dwellings shall be 200 feet. The minimum setback to all other property lines shall be 150 feet.

The subcommittee recommends to the full Commission that setbacks not apply to “internal boundary lines”.

The subcommittee recommends that the full Commission determine if setbacks are to be minimal in the ordinance and then specific in the required SUP.

The subcommittee recommends to the full commission that substations and switchyards on the property be included in terms of setbacks and screening required.

- (d) The maximum height of the lowest edge of the photovoltaic panels shall be 10 feet as measured from the finished grade. The maximum height of primary structures and accessory buildings shall be 15 feet as measured from the finished grade at the base of the structure to its highest point, including appurtenances. The Board of Supervisors may approve a greater height based upon the demonstration of a significant need where the impacts of increased height are mitigated.
- (e) PV solar panels and any associated equipment shall not be located on slopes 10 percent or greater and no site shall be graded more than 50 percent of the site surface area.
- (f) The facilities, including fencing, shall be significantly screened from the ground-level view of adjacent properties by a buffer zone at least 100 feet wide that shall be landscaped with plant materials consisting of an evergreen and deciduous mix (as approved by County staff), except to the extent that existing vegetation or natural land forms on the site provide such screening as determined by Page County. In the event, existing vegetation or land forms providing the screening are disturbed, new plantings shall be provided which accomplish the same. Opaque architectural fencing may be used to supplement other screening methods but shall not be the primary method.
- (g) The facilities shall be enclosed by security fencing on the interior of the buffer area (not to be seen by other properties) not less than nine (9) feet in height. The fence shall not be topped with razor/barbed wire. A performance bond reflecting the costs of anticipated fence maintenance shall be posted and maintained. Failure to maintain the security fencing shall result in revocation of the SUP and the facility’s decommissioning.
- (h) Ground cover on the site shall be native vegetation and maintained in accordance with the

Landscaping Maintenance Plan in accordance with established performance measures. A performance bond reflecting the costs of anticipated landscaping maintenance shall be posted and maintained. Failure to maintain the landscaping shall result in revocation of the SUP and the facility's decommissioning. Incorporation of native plant species that require no pesticides, herbicides, and fertilizers or the use of pesticides and fertilizers with low toxicity, persistence, and bioavailability is recommended. The operator shall notify the County prior to application of pesticides and fertilizers. The County reserves the right to request soil and water testing.

- (i) The Applicant shall identify at least one access corridor for wildlife to navigate through the Solar Facility. The proposed wildlife corridor shall be shown on the site plan submitted to the County. Areas between fencing shall be kept open to allow for the movement of migratory animals and other wildlife.

The subcommittee recommends that proposed wildlife corridor requirement be addressed only at the S.U.P. level so as not to apply to acre-based utility projects which might be as small as 2.1 acres.

- (j) The design of support buildings and related structures shall use materials, colors, textures, screening and landscaping that will blend the facilities to the natural setting and surrounding structures.
- (k) The owner or operator shall maintain the solar facility in good condition. Such maintenance shall include, but not be limited to, painting, structural integrity of the equipment and structures, as applicable, and maintenance of the buffer areas and landscaping. Site access shall be maintained to a level acceptable to the County. The project owner shall be responsible for the cost of maintaining the solar facility and access roads, and the cost of repairing damage to private roads occurring as a result of construction and operation.
- (l) A utility-scale solar facility shall be designed and maintained in compliance with standards contained in applicable local, state and federal building codes and regulations that were in force at the time of the permit approval.
- (m) A utility-scale solar facility shall comply with all permitting and other requirements of the Virginia Department of Environmental Quality.
- (n) The applicant shall provide proof of adequate liability insurance for a solar facility prior to beginning construction and before the issuance of a zoning or building permit to Page County.
- (o) Lighting fixtures as approved by the County shall be the minimum necessary for safety and/or security purposes to protect the night sky by facing downward and to minimize off-site glare. No facility shall produce glare that would constitute a nuisance to the public. Any exceptions shall be enumerated on the Concept Plan and approved by Page County.
- (p) No signage of any type may be placed on the facility other than notices, warnings, and identification information required by law.
- (q) All facilities must meet or exceed the standards and regulations of the Federal Aviation Administration ("FAA"), State Corporation Commission ("SCC") or equivalent, and any other agency of the local, state or federal government with the authority to regulate such facilities that are in force at the time of the application.

- (r) Any other condition added by the Planning Commission or Board of Supervisors as part of a SUP approval.

Sec. 125-76 Decommissioning

The following requirements shall be met:

- (a) Solar facilities which have reached the end of their useful life or have not been in active and continuous service for a period of one (1) year shall be removed at the owner's or operator's expense, except if the project is being repowered or a force majeure event has or is occurring requiring longer repairs; however, the County may require evidentiary support that a longer repair period is necessary.
- (b) The owner or operator shall notify Page County by certified mail and in person of the proposed date of discontinued operations and plans for removal.
- (c) Decommissioning shall include removal of all solar electric systems, buildings, cabling, electrical components, security barriers, roads, foundations, pilings, and any other associated facilities, so that any agricultural ground upon which the facility and/or system was located is again tillable and suitable for agricultural or forestall uses. The site shall be graded and re-seeded to restore it to as natural a pre-development condition as possible or replanted with pine seedlings to stimulate pre-timber pre-development conditions as indicated on the Preliminary Site Plan. Any exception to site restoration, such as leaving access roads in place or seeding instead of planting seedlings must be requested by the land owner in writing, and this request must be approved by the Board of Supervisors (other conditions might be more beneficial or desirable at that time).
- (d) The site shall be re-graded and re-seeded or replanted within 12 months of removal of solar facilities. Re-grading and re-seeding or replanting shall be initiated within a six-month period of removal of equipment.
- (e) Decommissioning shall be performed in compliance with the approved decommissioning plan. The Board of Supervisors may approve any appropriate amendments to or modifications of the decommissioning plan.

The subcommittee recommends that the full commission note that the consultants are referencing a local "approved decommissioning plan" which should be carefully crafted.

The subcommittee recommends that this plan begin by embracing the requirements of the state code 15-2-2241.2

The subcommittee recommends that the concept of "project bonding" be explored in addition to all other "cost of decommissioning guarantees".

The subcommittee recommends that salvage value not be considered for a reduction when calculating the estimated cost of decommissioning (for guarantee or bonding) as currently recommended by the consultants.

- (f) Hazardous material from the property shall be disposed of through any viable recycling

methods and in accordance with federal and state law.

- (g) The estimated cost of decommissioning shall be guaranteed by the deposit of funds in an amount equal to the estimated cost in an escrow account at a federally insured financial institution approved by the County.
 - 1. The applicant shall deposit the required amount into the approved escrow account before any building permit is issued to allow construction of the solar facility.
 - 2. The escrow account agreement shall prohibit the release of the escrow funds without the written consent of the County. The County shall consent to the release of the escrow funds upon on the owner's or occupant's compliance with the approved decommissioning plan. The County may approve the partial release of escrow funds as portions of the approved decommissioning plan are performed.
 - 3. The amount of funds required to be deposited in the escrow account shall be the full amount of the estimated decommissioning cost without regard to the possibility of salvage value.
 - 4. The owner or occupant shall recalculate the estimated cost of decommissioning every five years. If the recalculated estimated cost of decommissioning exceeds the original estimated cost of decommissioning by ten percent (10%), then the owner or occupant shall deposit additional funds into the escrow account to meet the new cost estimate. If the recalculated estimated cost of decommissioning is less than ninety percent (90%) of the original estimated cost of decommissioning, then the County may approve reducing the amount of the escrow account to the recalculated estimate of decommissioning cost.
 - 5. The County may approve alternative methods to secure the availability of funds to pay for the decommissioning of a utility-scale solar facility, such as a performance bond, letter of credit, or other security approved by the County.
- (h) If the owner or operator of the solar facility fails to remove the installation in accordance with the requirements of this permit or within the proposed date of decommissioning, the County may collect the surety and the County or hired third party may enter the property to physically remove the installation.

Sec. 125-77 Coordination of local emergency services

Applicants for new solar facilities shall coordinate with the County's emergency services staff to provide materials, education and/or training to the departments serving the property with emergency services in how to safely respond to on-site emergencies.

Sec. 125-78 Conditions

- (a) The Board of Supervisors may consider conditions addressing a proposed utility-scale solar facility, including, but not limited to, the following:
 - 1. A solar facility shall be constructed, maintained, and operated in substantial compliance with:
 - i. The development standards under this article.
 - ii. The approved concept plan.
 - iii. Any other conditions imposed pursuant to a Special Use Permit.
 - 2. The Special Use Permit may require the applicant to submit an erosion and sediment

control plan for review by the County or by a qualified third party, however, the third party review shall not supersede any requirements imposed by state agencies. The applicant shall construct, maintain, and operate the solar facility in compliance with the approved plan.

3. The Special Use Permit may require the applicant to submit a stormwater management plan for review by the County or by a qualified third party. The applicant shall construct, maintain, and operate the solar facility in compliance with the approved plan.
4. The applicant shall pay additional fees to cover the reasonable and actual cost of any review of the erosion and sediment control plan, the stormwater plan, and inspections performed by County approved qualified third parties.

The subcommittee reminds the full commission that (locally) the B.O.S. has authority over fees and recommends that the Planning Commission avoid the confusion of any wording that implies otherwise.

5. If the solar facility does not receive a building permit within eighteen (18) months of approval of the Special Use Permit, the Permit shall be terminated.

The subcommittee recommends to the full Commission a change to (36) months with an option for a 48 month(s) extension upon application and approval.

6. If the solar facility is declared to be unsafe by Page County, the facility must be in compliance within fourteen (14) days or the Special Permit shall be terminated, and system removed from the property.
7. The owner and operator shall give the County written notice of any change in ownership, operator, or Power Purchase Agreement within thirty (30) days.

The subcommittee recommends that the full Commission be aware that the fear or problem of “change of ownership” (with or without layers of Limited Liability Companies) and the problem of accurate self-reporting is a continuing concern.

Sec. 125-79 – 125-85 Reserved

The subcommittee reports that the following topics were discussed extensively and includes them not imbedded as they are in some cases found in multiple places, not currently included, or subject to debate as to where to be included:

1. **Conditions - proposed for applications, making the public aware, the ordinance, and the required S.U.P. when utility based. Our focus was often specifically “what conditions are to be included in the ordinance vs the S.U.P.?”**
2. **Screening – That requirements must be specific and detailed and handled in the S.U.P. as they could be applied specifically to a project location. We suggest to the Commission that language which might allow substandard screening be avoided. We support the use of natural growing screening but embrace any well designed, constructed, and maintained screening devices and always specific to a project.**
3. **Access Roads – conditions the be handled in the S.U.P. as location is determinative.**
4. **Set-Backs – as mentioned previously**
5. **Coverage requirement**
6. **The need for current zoning ordinance updates and coordination**

- 7. Erosion Control at all times in the life of a utility project.**
- 8. The balance between making projects possible and protecting the community interest.**
- 9. Changes and the appeal process and who will receive and determine a recommendation to the B.O.S. for action.**
- 10. The need at this time for direct contact with the consultants at the full commission level.**

ARTICLE II

Sec. 16-1 **Definitions** (*add these definitions*)

Applicant means the person or entity who submits an application to the locality for a permit under this ordinance.

Brownfield means former industrial or commercial sites typically containing low levels of environmental pollution such as hazardous waste or industrial byproducts.

Disturbance zone means the area within the site directly impacted by construction and operation of the facility.

Integrated PV means photovoltaics incorporated into building materials, such as shingles.

Operator means the person responsible for the overall operation and management of a facility.

Owner means the person who owns all or a portion of a facility.

Photovoltaic or "PV" means materials and devices that absorb sunlight and convert it directly into electricity.

Rated capacity means the maximum capacity of a solar facility based on the sum total of each photovoltaic system's nameplate capacity.

Site means the entire area containing a facility.

Solar facility, small-scale means a facility that either: (a) generates less than 20 kilowatts (kW) electricity from sunlight, consisting of one or more Photovoltaic (PV) systems and other appurtenant structures and facilities within the boundaries of the site; or (b) utilizes sunlight as an energy source to heat or cool buildings, heat or cool water, or produce electrical or mechanical power by means of any combination of collecting, transferring, or converting solar-generated energy; and (c) meets at least one of the following criteria: has a disturbance zone equal to or less than an acre; is mounted on or over a building, parking lot, or other previously disturbed area; or utilizes integrated PV only.

Solar facility, medium-scale means a facility that generates electricity from sunlight primarily to reduce onsite consumption of utility power for commercial and industrial applications. Sites are between one to three acres with a maximum capacity of 999 kW.

Solar facility, utility-scale means a facility that generates electricity from sunlight which will be used to provide electricity to a utility provider. Sites are generally over two acres and have a capacity in excess of one megawatt (1 MW).

The subcommittee's recommendation to the full commission is that the format of the ordinance, as well as definitions, be reviewed and edited by (1) consultant, (2) staff, and (3) legal.

The subcommittee's recommendation to the full commission is that both Acreage and Power Measure be used within the ordinance to assist with clarity and understanding to/by the reader.

The subcommittee recommends that the full commission consider the utility scale requirements if the acreage or power measure is exceeded by an all, (100%) on roof solar collector application.