



September 6, 2018

Page County Planning Commission
% Tracy Clatterbuck
103 S Court Street Suite F
Luray, VA 22835
(Transmitted via email)

Re: Solar Farms and Criteria for Siting and Permitting

Dear Chair and Members of the Planning Commission,

Thank you for the opportunity to address the Commission on August 28 regarding utility-scale solar facilities, siting conditions and processes for permitting. Given the complexity of this issue and the limited time I had before you, I wanted to follow up with a letter outlining the points I raised.

As I stated in the meeting, The Piedmont Environmental Council (PEC) is an advocate for solar, especially distributed solar power generation - small scale solar (usually rooftop) primarily designed to meet the immediate demands of the property in which it is located. Besides zero emissions and an investment that pays for itself, we believe distributed solar power generation is a great way to meet localized energy demands. It also reduces the need for traditional centralized power production and its associated infrastructure - mainly transmission lines.

The steadily declining cost of panels and the rising demand for green energy has spurred interest in the development of large-scale solar facilities throughout Virginia. These facilities are often sited in rural areas and referred to by many as solar farms. They have many of the same environmental benefits as rooftop solar. These benefits include zero emissions and the ability to provide power at times of peak-demand. But they are not farms and, at this scale, it is difficult at best to protect specific values associated with our agricultural areas. This is the case with any large scale energy project, renewable or otherwise - there will be an impact to the property and the surrounding area.

Utility-scale solar facilities require a vast amount of acreage for energy production at this scale - 7 to 10 acres per MW of production. Based on size, location, visibility, impacts to agricultural and natural resources, and the potential for additional infrastructure, a locality needs the ability to determine the appropriateness of sites and to address impacts.

Virginia has acres and acres of flat roof space devoid of solar panels in areas of moderate to high energy demand. We also have contaminated and/or underutilized industrial sites for this purpose. It is our belief

that we should be looking to these developed areas as the low hanging fruit of future solar sites. Large-scale solar facilities will play a role in the state's energy mix. But they should not come at the cost of our most productive agricultural and forested areas. Nor should they impact important scenic and historic resources that we rely upon for tourism.

Understanding the nature of utility-scale solar facilities and focusing on a process that promotes avoidance of important resources can eliminate conflicts before they arise. Creating clear standards and requirements will provide greater certainty for the applicant and protect the welfare of the County and its residents. When looking for new sites for solar facilities, we believe developers and localities should be in general agreement on locations appropriate for these industrial uses - areas that contain marginal farm soils (at best) and removed from important scenic and historic resources - prior to any public hearing on an individual application.

I have attached a brief summary of some of the points I raised during the meeting. I applaud the County's current use of a conditional or special use permit for these facilities. This type of public process allows for site specific issues to be raised and addressed and gives the community the ability to place their concerns on the record. In addition to this process, however, I strongly encourage the County to adopt a siting criteria policy prior to recommending to the board any utility-scale projects. We believe that a siting policy document would provide the necessary guidance to assist in your decision making.

Thank you again for inviting me to address the Commission on this important matter. Please feel free to contact me with any questions or requests for additional information.

Sincerely,

Dan Holmes
Director of State Policy
The Piedmont Environmental Council
dholmes@pecva.org
(571) 213-4250

Attachment:
Recommendations/Considerations for Solar Farm Siting

Recommendations/Considerations for Utility-Scale Solar Siting

1) Require a Public Process - Conditional or Special Use Permit

Utility-scale solar facilities are industrial facilities and should not be allowed by-right on agriculturally zoned lands. Given their size and nature, they should be subject to a Conditional or Special Use Permit. This process allows for an assessment of the impacts and, where warranted, conditions that mitigate those impacts. If severe impacts cannot be mitigated, the proposal should not go forward. Avoidance of sensitive resources can eliminate the likelihood of a severe impact.

2) Develop Siting Criteria Policy Document

A siting criteria policy should use the values/resources that are important to your citizens (often well-defined within Comprehensive Plans) to highlight potential impacts, mitigation measures and conflicts with county resources from utility-scale projects. The document should clearly delineate impacts to be avoided and those that could potentially be mitigated. It should set clear expectations and standards for the industry and provide the citizens some level of comfort that the county is protecting their health, safety and welfare in the process. Below are some of the areas that should be addressed in any policy.

3) Avoidance of Impacts to Agricultural Soils and Uses

Infrastructure should not be allowed on land that contains prime agricultural soils (federally designated). Soils of Statewide Importance should also be avoided if possible. Proposals should not negatively impact the future use of the site as agriculture. Grading and fill should be avoided. If any grading is required, it should not result in the loss of agricultural soils. Topsoil should be removed from the area to be graded. That soil should be stored on site and replaced after the grading is completed. Compression mats should also be employed to avoid compaction of soils. Impervious surfaces (beyond that associated with the panels) should be minimized/avoided. Natural vegetated buffers should be used to reduce runoff from the site.

4) Avoidance of Historic, Cultural and Scenic Resources

In the wrong location, the project could be viewed as a scenic nuisance and run counter to a locality's pursuit of historic resource protection and tourism associated with historic and scenic assets. Impacts to scenic resources (byways, rivers, overlooks, etc.) and historic districts/resources and gateways should be considered and addressed in any development of siting criteria. The locality could consider establishing distance requirements from known resources (battlefields, register properties, historic districts, etc.) and require a site specific analysis of viewshed impacts.

5) Removal of Infrastructure

Utility-scale solar facilities are ground mounted systems that include materials above-ground and subsurface. In order to protect the future use of agriculture on the property, all measures should be taken to protect against damages (compaction, removal of topsoil, contamination) of

the soils. All traces of the system should be removed at the end of a facility's useful life. This can be accomplished with a contract condition (landowner) and bonding from the company. Any site should be returned to its pre-construction condition. For example, the post mounts and cabling associated with the use should be removed from the property along with any remaining infrastructure at the end of the facility's useful life - all surface and subsurface elements.

6) Property Values

Property values will be affected. While anecdotal information should not be used in the findings related to any decision, answering the simple question of "Would you want to live next to one?" is a clear indicator that the value of adjacent properties will be impacted, at least for agricultural or residential purposes. Many localities are wrestling with the question of to what degree a facility would impact an adjacent property's value. While no agreed-upon figure has been established, some localities are seeking independent assessments after hearing questionable claims from the industry that impacts are nonexistent or negligible. Culpeper County is currently considering two bids from economists in response to their RFP to assess the financial impacts of proposed facilities on adjacent properties within the county. Other localities may also be following suit.

7) Transmission Impacts

Localities should make themselves aware of associated transmission and/or substation upgrades. If required, the impacts of that infrastructure should be assessed along with the impacts of the facility.

8) Continued Agriculture or Habitat

Proposals that retain some agricultural use of the property should receive greater support than those that do not. An example would be a design that allows for continued grazing, hay and/or crop growing within the area of impact. This is difficult as many grazing animals are not compatible with solar facilities. As well, designs that would allow for easy harvesting or crops to be planted in conjunction with panels are not common in projects of this scale. But if discussed with the applicant early, the project may be able to be designed to allow for the equipment or fencing necessary for crops and/or livestock (sheep primarily) in a limited fashion. As well, some communities are requiring the establishment of native meadows as a way to increase habitat and decrease the use of herbicides or mechanical clearing.