

MEMORANDUM

TO: Planning Commission

FROM: Justin D. Sanders, Senior Planner
Jude Cochran, Planning & Zoning Administrator

DATE: October 4, 2023

RE: Proposed Amendments to the 2025 Comprehensive Plan and Zoning Ordinance Related to Large-Scale Solar Energy Systems

Background

In April, the Board of Supervisors charged the Planning Commission and County staff to study, address, and seek community comment and input on large-scale solar energy systems in Montgomery County.

Following this resolution by the Board of Supervisors, a Solar Energy Work Group was formed, consisting of four (4) members of the Planning Commission (Commissioners Foster, Linkous, Miller, and Rice), Supervisor Fijalkowski, and members of County Staff (Mr. Cochran, Ms. Hopkins, Mr. McMahon, Mr. Sanders, and Ms. Wright). Over the past three months, this group has reviewed a variety of literature on solar energy technology and the various approaches undertaken to regulate solar energy development in localities across the Commonwealth.

The Work Group's efforts were divided into two distinct parts: updates to the County's 2025 Comprehensive Plan and updates to the Zoning Ordinance.

The County's Comprehensive Plan is an overarching set of guiding principles and policies related to land use in the County. The Comprehensive Plan is not a legally binding document, but does influence decisions and works in tandem with the Zoning Ordinance. The current Comprehensive Plan, adopted in 2004, does not address solar energy but does discuss other utilities.

The Zoning Ordinance, adopted as part of the County Code serves as the series of legally enforceable standards guiding development in the County. The Zoning Ordinance was updated in 2015 to address solar energy, defining different scales of solar development and specifying the Zoning Districts in which solar energy systems were permitted by-right or by Special Use Permit.

The Work Group met on several occasions to guide staff on the development of the draft language which follows. Following the drafting of the proposed amendments, a small group of community stakeholders were sent the draft for review and comment. This stakeholder group included representatives of the solar industry, a faculty member from Virginia Tech, a representative from the Virginia Farm Bureau, and an interested local resident. This first round of review was conducted prior to the release of the documents to the larger public for review and comment. Comments from these stakeholders are included as part of your packet.

Staff held a public open house on the proposed amendments on August 9, 2023. Members of the public provided feedback to staff on several aspects of the proposed amendments, including the total acreage cap for solar projects within the County and specific regulations proposed by the Solar Work Group. The Planning Commission held a work session following the public open house, and provided staff with additional guidance on the proposed amendments. Feedback received from the open house and work session demonstrate that many members of the community are divided on the County's approach to solar energy, with responses ranging widely.

Staff has reviewed the feedback received from the Planning Commission, the public open house, comments from solar industry representatives, and feedback from other community stakeholders to propose a series of alternatives for the Commission's consideration. Verbiage, grammar, and formatting changes to the draft documents will be integrated into the final draft document to be presented for public hearing in November. Other considerations, including project size and the total acreage limits within the County, setbacks, and buffer yard minimums must still be determined. Staff asks that the Commission reach a consensus on each item included below to shape the final draft recommendations.

The selected alternatives will be heard in public hearing by the Commission at the November 8, 2023 meeting. The Board of Supervisors intends to hold a public hearing on December 13, 2023 and take final action on the proposed amendments.

Comprehensive Plan Items

Item 1a: Total Cumulative Acreage Limit

Total County Acreage	248,609 acres
Town of Blacksburg	12,679 acres
Town of Christiansburg	9,439 acres
Unincorporated Montgomery County	226,491 acres
Land Type	
Federal Lands	21,720 acres
Agricultural and Forestal Districts	23,232 acres
Conservation Easements	17,239 acres
Historic Districts	9,717 acres
Growth Areas	25,897 acres
Residential Transition	11,685 acres
Urban Development Area	821 acres
Urban Expansion Area	5,660 acres
Village Expansion Area	7,731 acres
Total Land Available for Solar	136,830 acres

Alternative A: 1,500 Acres. This number caps the total amount of land in the County set aside to slightly more than 1% of total available acreage within the County. This alternative is the recommendation made by the Solar Work Group.

Alternative B: 4,500 Acres. This number caps the total amount of land in the County set aside to slightly more than 3% of total available acreage within the County. This alternative is the recommendation of Staff.

Alternative C: No Cap. As all large-scale solar projects would be allowed only by an approved Special Use Permit, the Planning Commission and Board of Supervisors will review each project individually to assess impacts. Each review would consider previously approved projects as part of the evaluation of the Special Use Permit application. Staff would provide the total cumulative acres already occupied by solar as part of the project analysis.

Item 1b: Calculation of Acreage

No recommendation was made by the Solar Work Group on this item.

Alternative A: Acreage for the project considered as contributing toward the acreage cap will be considered the total project area, including panels, battery storage facilities, and associated equipment, buffer yards, fencing, landscaping, and project setbacks.

Alternative B: Acreage for the project considered as contributing toward the acreage cap will be considered only the area covered by panels, battery storage facilities, and associated equipment. This is the alternative recommended by staff.

Item 2: Location of Solar Facilities in Relationship to Adjacent Facilities

Alternative A: Solar energy facilities may not be located on parcels immediately adjacent to previously approved solar energy facilities. This alternative is the recommendation of the Solar Work Group.

Alternative B: No language will be added regarding the location of facilities in relationship to another facility. The location of solar energy facilities in relationship to other projects will be evaluated as part of the review of Special Use Permit applications. This alternative is recommended by staff.

Item 3: Limitations on Project Size

Alternative A: The County discourages any project with photovoltaic panel coverage of more than 100 acres. This alternative is recommended by the Solar Work Group.

Alternative B: The County discourages any project with photovoltaic panel coverage of more than 500 acres.

Alternative C: No project size limitation is proposed. Project size will be evaluated as part of the Special Use Permit application for each project, and can fluctuate due to topographical challenges, buffer and setback requirements, and other factors. This alternative is recommended by staff.

Zoning Ordinance Items

Item 4: Limitations on Project Size (Pending Consensus on Item 3)

Alternative A: Project size for Community Scale Solar is limited to 50 acres. Project size for Utility Scale Solar is limited to 100 acres. This alternative is the recommendation of the Solar Work Group.

Alternative B: Project size for Community Scale Solar is limited to 250 acres. Project size for Utility Scale Solar is limited to 500 acres.

Alternative C: No project size limitation is outlined. Project size will be evaluated as part of the Special Use Permit application for each project and can fluctuate due to topographical challenges, buffer and setback requirements, and other factors. This alternative is recommended by staff.

Item 5: Minimum Required Setbacks

Alternative A: The County requires photovoltaic panels, photovoltaic equipment, and other related accessory structures to meet a minimum 75-foot setback within Community Scale projects and a 150-foot setback within Utility Scale projects. Additional increased setbacks from special land uses would be considered as part of the review of the Special Use Permit for each individual project. This alternative is recommended by the Solar Work Group.

Alternative B: The County requires photovoltaic panels, photovoltaic equipment, and other related accessory structures to meet a minimum 100-foot setback. Additional increased setbacks from special land uses or to mitigate other impacts would be considered as part of the review of the Special Use Permit for each individual project. This alternative is recommended by staff.

Alternative C: The County requires that photovoltaic panels, photovoltaic equipment, and other related accessory structures shall meet the minimum principle structure setback requirements for that zoning district. Increased setbacks will be evaluated as part of the Special Use Permit application for each project, and can fluctuate due to topographical challenges, adjacent land uses, and other factors.

Item 6: Minimum Required Buffers

Alternative A: The County requires a 50-foot deep buffer within Community Scale projects and a 75-foot buffer within Utility Scale projects. This alternative is recommended by the Solar Work Group.

Alternative B: The County requires that buffers be included in the project and shall, at minimum, be located within the entirety of the minimum principle structure setback requirement for that zoning district. Increased setbacks will be evaluated as part of the Special Use Permit application for each project, and can fluctuate due to topographical challenges, adjacent land uses, and other factors. This alternative is recommended by staff.

Item 7: Battery Storage Facilities

Alternative A: The County only permits Battery Storage Facilities within Utility Scale projects. This alternative is recommended by the Solar Work Group

Alternative B: The County permits Battery Storage Facilities within both Community Scale and Utility Scale Solar projects. This alternative is recommended by staff to address future changes in technology.