



SOMERSET COUNTY
DEPARTMENT OF TECHNICAL AND COMMUNITY SERVICES

Gary R. Pusey, Director
Kristen M. Tremblay, Assistant Director

MEMORANDUM

TO: Somerset County Planning Commission
FROM: Kristen M. Tremblay, Assistant Director
DATE: June 29, 2018
SUBJECT: Solar Ordinance Discussion

Attached, the Planning Commission will find a DRAFT Utility Scale Solar Floating Zone Ordinance for discussion. Staff has attempted to craft the attached draft ordinance with some of the Planning Commissioner's past concerns in mind.

The floating zone ordinance only addresses projects larger than two (2) megawatts (MW) in generating capacity. For reference, one (1) MW requires roughly six (6) acres of land. As discussed at the Planning Commission's June 7, 2018 meeting, the idea is that small solar installations for onsite residential use be treated as a by-right accessory use, and medium sized solar installations for onsite commercial use require a Special Exception through the Board of Zoning Appeals (and subsequent site plan approval by the Planning Commission). It is intended that the 'non-utility' scale sized facilities be incorporated into the comprehensive zoning ordinance amendment at a future date.

As a reminder, a floating zone replaces the underlying base zoning district and acts like a rezoning – two (2) public hearings would be required with both the Planning Commission and the County Commissioners. The 'change or mistake' rule does not need to be met.

TOPICS OF DISCUSSION:

The Planning Commission may wish to focus in on its key concerns, as the 'details' can be corrected once the Planning Commission has agreed on the main points.

1. The DRAFT ordinance contains many different elements and in staff's opinion, is quite extensive. It includes:
 - Where solar can be located, the elements required for site plans, maintenance and construction plans requirements, visual concerns, bonds, and decommissioning amongst others.

Does the Planning Commission believe that all its concerns have been addressed?

2. Staff has been considering the inclusion of a provision that could act as a ‘cap’ on the size of new solar energy facilities. A thought would be that no new solar energy facilities be greater than a certain amount of acreage – such as 1,500 acres - or based on a percentage of the total available farmland – such as less than one (1%) percent. The Planning Commission is encouraged to discuss this matter to determine if a provision addressing this is needed, and if so, what would it like to see?
3. The Planning Commission may also wish to further discuss the placement of solar energy facilities on prime agricultural soils (See attached Section C (4) – page one (1)).
4. Staff has made a strong attempt to address what occurs after a period of 25-30 years, which is the period of time that the solar industry estimates that the useful life of a solar energy facility will be. A number of provisions addressing potential outcomes have been included for the Planning Commission’s review. Does the Planning Commission believe that staff is on the right track and would it like to discuss the provisions provided?

RECOMMENDATION: It is recommended that the Planning Commission review the attached DRAFT Utility Scale Solar Floating Zone Ordinance and focus its attention on the ‘high-level’ concerns.

Attachments:

1. June 29, 2018 DRAFT Utility Scale Solar Floating Zone – Ordinance

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***Please note that the following is offered for discussion purposes only and is a FIRST DRAFT for utility scale solar only.**

**SOME PROVISIONS WILL REQUIRE ADDITIONAL DISCUSSION
AND NEED MORE WORK.**

The Planning Commission is encouraged to review the ordinance carefully and be prepared to offer suggestions on this DRAFT at its July 5, 2018 meeting.

A. Statement of Intent.

The purpose of the utility scale solar floating zone is to allow for the orderly development of utility scale solar energy facilities generating more than two (2) megawatts in electricity (AC) that are appropriately sited and sized. Furthermore, it is intended that utility scale solar energy facilities are not placed on prime agricultural lands, are aesthetically attractive, and compatible with the surrounding neighborhood.

B. Application for Floating Zone.

Refer to Section 6.7 ‘Procedure for Floating Zone District Approval.’ (*Planning Commission: This section informs the applicant that two (2) public hearings are required by both the Planning Commission and County Commissioners and outlines the procedure for application)

C. Applicability.

1. Utility scale solar energy facilities will only be considered on parcels designated as ‘Agricultural – Rural’ (AR) or ‘General Industrial’ (I-2).
2. Siting of utility scale solar energy facilities will not be considered for placement within 1,500 feet of the right-of-way for US Route 13, Ocean Highway or MD Route 413, Crisfield Highway.
3. [*The Planning Commission may wish to discuss a cap on size – Please see accompanying memorandum for discussion points]
4. Utility scale solar energy facilities will not be considered for parcels consisting of 50% or more prime agricultural soils as determined by the Natural Resources Conservation Service Soil Service Soil Survey and as further advised by the Somerset County Soil Conservation District. [*The Planning Commission may wish to discuss this topic further].
5. Utility scale solar energy facilities will not be considered for locations designated as a Growth Area by the Somerset County Comprehensive Plan or a Priority Funding Area.

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D. Site Plan Requirements.

1. Site Plans must be submitted in accordance with Section 10.9 and Appendix ‘A’ – Information Required on a Site Plan (**Planning Commission this is the section we believe will match with the provisions of the proposed comprehensive ordinance amendment*).
2. Additional site plan information required must include, but is not limited to the following:
 - i. Total acreage of the parcel(s), acreage on the parcel(s) within the limits of disturbance, acreage under the solar energy facility equipment including panels, inverters, transformers and wiring;
 - ii. The amount of energy in megawatts (MW) that the facility is expected to generate in alternating current (AC) and direct current (DC);
 - iii. Dimensions, locations, and orientation of the solar energy equipment. The site plan must also show the type of system proposed (i.e. tracking or stationary);
 - iv. The number of posts or pilings anticipated to be placed on the parcel(s); (**Planning Commission see Section E (1)(v) – page three (3) and Section E (7) – page four (4) for regulations regarding drainage*).
 - v. The materials that are anticipated to be utilized (i.e. aluminum, copper, etc.) and approximate percentages;
 - vi. Location of interconnection to any existing substations. In the event that a new substation or connector station is proposed, it must also be shown on the site plan;
 - vii. Location of staging areas for construction including details describing the materials to be used as well as the location of any permanent structures for the long term maintenance of the facility or offices;
 - viii. The location of internal access roads and materials to be used;
 - ix. Existing and proposed drainage facilities on the parcel(s);
 - x. Distances to dwellings on adjacent properties;
 - xi. Site distance triangles, if applicable;
 - xii. Location of fencing, if applicable;
 - xiii. Any additional information requested by the Zoning Administrator.

E. Additional Considerations.

1. A narrative of the proposed utility scale solar energy system must accompany the application and site plan. The narrative must include the following, but is not limited to:
 - i. Upgrades or improvements to the current electric grid that are required to support the proposed solar energy facility;

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- ii. The determination or status of the applicant(s) intent to pursue interconnection to the grid and the status of the application for a ‘Certificate of Public Convenience and Necessity’ (CPCN) with the Maryland Public Service Commission (PSC);
 - iii. A plan for the long term maintenance of the facility is required. Innovative solutions are encouraged. The long term maintenance plan must address the following:
 - 1. Solar energy equipment including panels, racking, inverters, transformers, substations or connector stations (if applicable), and wiring;
 - 2. Drainage;
 - 3. Turf, along with any anticipated herbicide and pesticide usage;
 - 4. Other landscaping;
 - 5. Invasive species management;
 - 6. Natural habitat protection and mitigation measures, if applicable
 - 7. Fencing, if applicable;
 - 8. Glare;
 - 9. Noise and dust control during construction.

A maintenance plan is required and must be approved by the County as part of an application for a building permit. The maintenance plan must be accompanied by an appropriate surety in the form of cash or a letter of credit in an amount equal to 15% of the landscaping and fence maintenance required for a period of 30 years based on an estimate prepared by a Maryland licensed engineer. The landscaping and fencing maintenance cost estimate must be reevaluated every ten (10) years by a Maryland licensed engineer.
 - iv. A construction plan including, but not limited to, hours of operation, number of trucks entering and leaving the site, lighting, anticipated noise generated, etc.
 - v. A drainage plan is required as part of stormwater management in conformance with current Maryland regulations.
 - vi. The applicants must provide a plan for any remaining portion of any parcel that is not designated to be developed for the solar energy system. This may include the continuance of farming on a portion of a parcel, pollinator friendly habitats, or others.
2. All applicable local, state and federal regulations must be adhered to. This may include, but is not limited to: the Chesapeake Bay Critical Area Ordinance, Forest Conservation Ordinance, erosion and sediment control, stormwater regulations, and the Floodplain Ordinance.

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3. Construction must begin within one (1) year of approval by the County Commissioners. Extensions may be granted by the County Commissioners, however in no event shall the extension surpass a total period of three (3) years.
4. Future Technology: In the event that the solar energy facility proposes to change its footprint, height, or any other modification that materially affects the impacts created by the facility at the time of installation due to technological advances after initial installation, county approval is required.
5. In the event that it is determined by the Maryland State Health Department or any other applicable government agency that the solar energy facility is comprised of hazardous materials at any point after installation, the owner or assigns is jointly and severally liable for mitigation.
6. Furthermore, if on-site storage of electricity is proposed for or after initial installation, a plan for maintenance and emergencies must be submitted to the County before placement on the parcel(s).
7. Panel supports or solar array posts are not allowed to be placed in drainage ditches.
8. Collector-style solar energy facilities that utilize mirrors are not permitted.
9. All wiring must be underground except where necessary to connect to the grid.
10. Topsoil is not permitted to be removed from the property(s).
11. Materials and solvents used for cleaning solar energy equipment must be biodegradable.
12. Any required right-of-way(s) must be identified and secured through an easement, lease, service agreement or other legally binding document.
13. In the event that the Maryland Public Service Commission's (PSC) Certificate of Public Convenience and Necessity (CPCN) conditions are more stringent than those required by the County, the stricter of the two (2) must apply.

F. Bonds.

1. Bonds will be required for decommissioning and the long term maintenance of the landscaping and fencing. A bond for the repair of roads may be required as determined either by the Maryland State Highway Administration or Somerset County Department of Public Works Roads and Waterways Division.

G. Additional Notification Requirements.

1. A single point of contact must be provided to the Department of Technical and Community Services for any change in solar energy facility ownership in order to address complaints and must be updated annually.
2. A public informational meeting must be held by the applicant(s) separate from Somerset County required meetings and hearings for all interested parties including adjacent property owners to explain the project and discuss potential

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impacts. The informational meeting must be held prior to the first meeting of the Planning Commission on the application.

3. Local fire departments and emergency services personnel must receive notice of the proposed facility by the applicants. In the event that training is desired by these persons, the solar energy facility owner or its assigns must provide this training within three (3) months of commercial operation.
4. Notification letters must be sent by the applicant via first-class mail to all property owners within 500 feet of the property(s).

H. Bulk Regulations.

1. Utility scale solar energy facilities must be setback 75 feet from adjacent property lines. Setback requirements may be waived for an adjacent parcel which is intended to be developed with utility scale solar and is included in the same application package.
2. New substations or connector stations, inverters and transformers must be setback 600 feet or more from existing dwellings, schools, churches, public right-of-ways, and subdivisions of 10 or more improved lots.

I. Visual Standards.

1. A full visual shield must be provided on all sides of the solar energy facility. The visual shield must be 100% opaque within five (5) years from the start of construction, and must reach a height of at least eight (8) feet. A combination of vegetation, fencing, berms, or other materials may be used in accomplishing this standard. Existing on-site vegetation, fencing, berms, or other materials that effectively serve as a visual shield may be considered to meet this standard. Creativity is encouraged.
2. Furthermore, it is intended that inverters, transformers, and any other appurtenances associated with the solar panel arrays visually blend with the adjacent parcel(s) and be as unobtrusive as possible. This may include naturally colored casing (green, brown, etc.) and/or a vegetative buffer.
3. **Landscaping, Turf.**
 - i. Low growth grass consisting of native and/or salt tolerant species is required. Pollinator friendly habitat or habitats for animal husbandry may be created, however the grounds surrounding and within the facility must be kept in a reasonable state and height at all times.

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4. Landscaping, Plantings.

- i. If landscaping is proposed to meet the visual shield standard, solar energy facility owners are encouraged to plant at the beginning of construction. Care should be given to the timing and placement of vegetation on-site.
- ii. No more than 50% non-native species may be used.
- iii. At least one (1) row of evergreen plant materials including trees and shrubs reaching a height of at least eight (8) feet within five (5) years is required.
- iv. Vegetation existing on the parcel(s) may be used to meet the visual buffer requirements if it is determined by the Department of Technical and Community Services that it is sufficient to meet the requirement. The vegetation to be retained for this purpose must be shown on the site plan.
- v. A bond is required in an amount equal to 100% of the cost of materials and installation plus a 10% contingency. The bond will be returned provided that the Department of Technical and Community Services has determined the survivability of the installed vegetation and a bond for the long-term maintenance of the landscaping has been submitted and approved by the County. See Section (E)(1)(iii).

5. Fencing.

- i. Fencing is not required but may be necessary for security. If fencing is used, the applicant(s) is encouraged to utilize alternative and innovative means of facility protection and visual shielding. This could include berms and/or agriculturally friendly fencing. Fences may not exceed eight (8) feet in height.

6. Glare.

- i. In the event that glare is identified by the Department of Technical and Community Services, the owner of the solar energy facility, or its assigns, must address the concerns within two (2) months of identification. If new vegetation is proposed to address a glare concern, and there is a seasonal issue, the owner of the solar energy facility, or its assigns, may have an extension of time to address the concern up to six (6) months after glare identification by the Department of Technical and Community Services.

7. Solar Panels.

- i. Solar panels that visually appear to be broken must be replaced or removed within 45 days of identification by the Department of Technical and Community Services.

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8. Signage.

- i. Signage is required for each property developed that notifies the public of the facility and a means to contact the facility owner for complaints. In the event that the contact information is no longer applicable, new signage with up-to-date contact information is required.

J. Decommissioning.

1. A decommissioning plan is required to be submitted and approved by the County prior to the application for a building permit. Amendments to the plan prior to decommissioning must also be approved by the County.
2. Decommissioning by the solar energy facility owner or its assigns must begin within three (3) months of any of the following conditions unless a plan for its continuing use has been provided and approved by the County:
 - i. If the generating capacity falls below five (5%) percent of the initial generating capacity at installation;
 - ii. The solar energy facility has been damaged to such an extent that the facility will not be replaced or repaired. An example of this would be after a natural disaster.
 - iii. Upon the abandonment of the facility by the utility scale solar energy facility owner or its assigns as determined by the Department of Technical and Community Services.
3. Decommissioning must be completed within one (1) year once begun.
4. If a partial decommissioning occurs, a new decommissioning plan and associated cost estimates must be prepared.
5. Following decommissioning, the Department of Technical and Community Services must perform an inspection of the property(s) to determine adequacy of the decommissioning and adherence to the decommissioning plan before any performance bonds will be released.
6. Decommissioning plan elements must include, but are not limited to:
 - i. Decommissioning cost estimates;
 - ii. Removal of all above ground structures including, but not limited to solar panel arrays, inverters and transformers, concrete pads, internal roads materials, fencing, and other debris. Landscaping must be removed, with the exception of land that falls in a Chesapeake Bay Critical Area, unless a signed written statement is provided by the property owner(s) stating otherwise;
 - iii. Removal of underground wiring and other structures;
 - iv. A plan for decommissioned material that includes reclamation, salvage, recycling, and disposal;

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- v. Estimates for the amount of materials to be salvaged along with a contingency plan in the event that the local salvage market is inundated;
 - vi. Restoration of the property(s) to a similar or better condition than at the time of installation. This may include reseeded, tilling, or reforestation.
7. A decommissioning cost estimate must accompany the decommissioning plan and be prepared by a Maryland licensed engineer at the cost of the facility owner(s). The decommissioning cost estimate must be updated every ten (10) years by a Maryland licensed engineer at the cost of the facility owner(s) and submitted to the Department of Technical and Community Services. Prior to decommissioning the facility, a cost estimate must be prepared by a Maryland licensed engineer regardless of the amount of time that has passed since the prior cost estimate. The County may prepare its own decommissioning cost estimate with the cost to be borne by the owner(s) of the facility.
 8. If the facility has continued in its use after a period of 30 years, either by ‘re-racking’ or installing newer systems or technologies, a revised decommissioning plan must be submitted to include changes to the facility.
 9. No more than 80% of the reclamation or salvage value may be used in determining a financial surety. 20% of the cost of decommissioning must be provided to the County via a performance bond in a form approved by the County prior to commercial operation. At the time of decommissioning, if the reclamation or salvage value exceeds the costs to decommission as determined by a Maryland licensed engineer, the performance bond will be released once decommissioning has been completed and considered acceptable to the County.