MC Keegan-Ayer
Council Member District 3

FREDERICK COUNTY GOVERNMENT

COUNTY COUNCIL

To: **County Council**

From: **Council Vice President, MC Keegan-Ayer & Co-Sponsor Council Member Jessica Fitzwater**

Date: **March 21, 2017**

Re: **Solar Facilities and Floating Zone**

Issue: Should the Frederick County Council delete existing Code provisions related to solar collection systems, and adopt new provisions defining three categories of solar energy systems, identifying in which Zoning districts the solar energy systems may be located as a permitted use, establishing a Commercial Solar Facility Floating Zone, and certain other criteria?

Background: Currently a Solar Collection System is permitted in any zoning district on the roof or exterior walls of structures. Their size is limited by specific parameters, however they are permitted in any zoning district subject to setback and size restrictions.

What would the new bill do?

The bill defines three types of solar facilities: Solar Facility Commercial, Solar Facility, Accessory; and Solar Facility, Community Energy Generating System.

The Bill also allows "Solar Facility, Commercial" to be located in the General Industrial (GI) and Limited Industrial (LI) zones as a "principal permitted use subject to site development plan approval," with specific lot and height requirements.

There are several proposed design criteria that apply to a Solar Facility, Commercial in the LI or GI district. Listed are several relevant points.

- All applications shall include glint and glare analysis of proposed solar facility.

- Screening required by a combination of berms, evergreen plantings and fencing to minimize view of solar facility.
- Applicant must comply with all applicable local, state and federal regulations.
- All solar facilities and panel disconnects must be mapped and registered with the Frederick County Division of Fire and Rescue Services.
- If, for a period of 6 months, the solar facility ceases to generate electricity or is disconnected from the electric grid, the approval will terminate with several caveats.

There are also several proposed provisions that apply to a Solar Facility in the Commercial Floating Zone District.

- Solar Facility, Commercial shall be a floating zone which, may be established within the Agricultural zone having the corresponding Comprehensive Plan land use designation.
- Size and Location (Selected Points)
    - Land eligible for Solar Facility – Commercial District must be zoned Agricultural/Rural.
    - The land subject of the floating zone application may not be contiguous to a community growth boundary as designated on the County Comprehensive Plan.
    - The land subject of the floating zone application shall have a minimum size of 10 acres and shall not exceed 750 acres.
    - The land subject of the floating zone application may not be encumbered by an Agricultural Preservation Easement, located within a Priority Preservation Area (PPA) or a Rural Legacy Area (RL) in the County Comprehensive Plan, or be located within two (2) miles of the centerline of the right-of-way of U.S. Route 15, outside the Frederick City limits from the Pennsylvania border to the Virginia border, that Route having been designated as part of the Journey Through Hallowed Ground National Heritage Area. If the land subject to the floating zone application are within two (2) miles of the centerline of U.S. Route 15, the application may be conditionally accepted and the applicant will have the burden to establish that the proposed project will not be visible from U.S. Route 15.

- Approval Criteria (Selected Points)
  - Approval or disapproval for an application for a Solar Facility – Commercial Floating Zone shall be determined through evaluation of the impact of the proposed project upon adjacent and nearby properties.
  - Proposed project, including all areas of disturbance, shall not exceed the lesser of 10% of the tract's or tracts' tillable acreage or 75 acres in size.
  - A 25 foot deep buffering and screening area shall be provided.
  - Applicants must apply with all local, state and federal law.
  - If for a period of 6 months, the solar facility ceases to generate electricity or is disconnected from the electric grid, the approval will terminate with several caveats.
- Application and Approval (Selected Points)
  - Before submitting application, applicant shall publicize proposed application and hold meeting to community members regarding potential project impacts.
  - Phase I justification and floating zone reclassification application and procedures will be the same as established in the Frederick County Zoning Code.
  - Phase II approval shall follow the site development plan process. If land granted approval it may not be further subdivided. There are several criteria provided.

Proposed Definitions

- "Solar Facility, Accessory" is a permitted use in all zoning districts. And is defined as a photovoltaic solar energy system mounted on a building or on the ground which generates electricity in an amount that does not exceed two hundred percent of the electric consumption of the principal use.
- "Solar Facility Commercial" is a photovoltaic solar energy system that generates electricity in an amount that exceeds two hundred percent of the consumption of the uses on the parcel upon which it was constructed and the excess electricity is fed into the electric grid.
- "Solar Facility, Community Energy Generating System" is a photovoltaic solar energy system which satisfies the requirements of the State Public Utilities Code.

Bill No. _____

Concerning: Solar Facilities and Floating Zone

Introduced: _____

Revised: _____ Draft No. _____

Enacted: _____

Effective: _____

Expires: _____

Frederick County Code, Chapter _____

Section(s) _____

COUNTY COUNCIL
FOR FREDERICK COUNTY, MARYLAND

By: Council Vice President M.C. Keegan-Ayer. Co-Sponsor Council Member Jessica Fitzwater

AN ACT to: Delete existing Code provisions related to solar collection systems and adopt new provisions defining three categories of solar energy systems, identifying in which Zoning districts the solar energy systems may be located as a permitted use, establishing a Commercial Solar Facility Floating Zone and certain other criteria.

Executive: _____ Date Received: _____

Approved: _____ Date: _____

Vetoed: _____ Date: _____

By amending:

Frederick County Code, Chapter, 1-19 Section(s) 5.310, 6.100, 9.205.4, 8.205.5, 8.335, 8.401, 10.700, 11.100

Other: _____

Boldface	*Heading or defined term.*
Underlining	*Added to existing law.*
[Single boldface brackets]	*Deleted from existing law.*
* * *	*Existing law unaffected by bill.*

Bill No. _____

The County Council of Frederick County, Maryland, finds it necessary and appropriate to delete existing Code provisions related to solar collection systems and adopt new provisions defining three categories of solar energy systems, identifying in which Zoning districts the solar energy systems may be located as a permitted use, and establishing a Commercial Solar Facility Floating Zone, and certain other criteria.

NOW, THEREFORE, BE IT IN ENACTED, that the Frederick County Code be, and it is hereby, amended as shown on the attached Exhibit 1.

_____
Harold F. (Bud) Otis, President
County Council of Frederick County,
Maryland

Exhibit 1

1-19-5.310. USE TABLE.

(A) *Permitted uses and required development review.*

P Principal permitted use subject to design regulations

PS Principal permitted use subject to site development plan approval. See §§ 1-19-2.160, and 1-19-3.300 through 1-19-3.300.4

E Principal permitted use as a special exception with site development plan approval. See §§ 1-19-8.320 and following

T Permitted as temporary use as a special exception. See § 1-19-8.300

X Permitted as temporary use only. See § 1-19-8.700

SW Solid Waste Floating Zone

A blank indicates that the use is not permitted under any situation

* * *

	Zoning Districts													
Uses	*RC*	*A*	*R1*	*R3*	*R5*	*R8*	*R12*	*R16*	*VC*	*MX*	*GC*	*ORI*	*LI*	*GI*
Governmental and Nongovernmental Utilities														
Solar Facility, Commercial													PS	PS

* * *

1-19-6.100. DESIGN REQUIREMENTS FOR SPECIFIC DISTRICTS.

* * *

Use Classification	*Minimum Lot Area*	*Minimum Lot Area per Unit*	*Lot Width*	*Front Yard*	*Side Yard*	*Rear Yard*	*Height*
Limited Industrial District LI							
Solar Facility, Commercial	20,000 sq. ft.		200	50	50	50	30'
General Industrial District GI							
Solar Facility, Commercial	1acre		200	50	50	50	30'

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* * *

1-19-8.205.4. [SOLAR COLLECTION SYSTEM.] <u>SOLAR FACILITY, ACCESSORY.</u>

[A solar collection system is permitted in any zoning district on the roof or exterior walls of structures.] <u>Solar Facility, Accessory, is a permitted use in all zoning districts.</u>

1-19-8.205.5. [SOLAR ARRAY.] <u>SOLAR FACILITY, COMMUNITY ENERGY GENERATING SYSTEM.</u>

[The footprint of the solar array and any individual component shall be used in calculating the square footage by drawing a line around the exterior limits of an individual solar array. Solar arrays are permitted in any zoning district subject to the following setback and size restrictions:

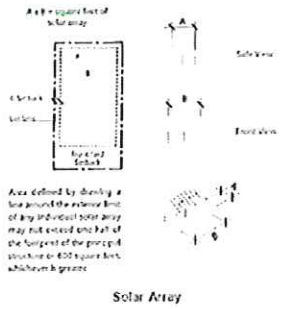
(A) The total square footage of the solar array(s) shall not exceed that of the principal structure;

(B) The footprint of an individual solar array shall not exceed the greater of:

(1) One-half of the footprint of the principal structure or

(2) Six hundred square feet.]

[



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<u>Solar Facility, Community Energy Generating System is an accessory use in all zoning districts and the facility may be located on a different parcel of land than that of the subscribers. A zoning certificate must be obtained prior to construction or installation of the facility.</u>

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1-19-8.401. SOLAR FACILITY COMMERCIAL IN THE LI OR GI DISTRICTS

The following design criteria shall apply to a Solar Facility, commercial in the LI or GI districts.

(A) All applications shall include justification from the applicant as to why the site was selected and a glint and glare analysis of the proposed solar facility identifying the angle and height of reflection and the impacts upon nearby properties, roadways and airports.

(B) The appearance and visual impact of the solar facility shall be minimized by the use of screening comprised of a combination of berms, evergreen plantings and fencing.

(C) The applicant must comply with all applicable federal and state regulations, including but not limited to obtaining a certificate of public convenience and necessity from the Public Service Commission if required, and in the removal and disposal of the solar facility and all of its components.

(D) All solar facilities and panel disconnects must be mapped and registered with the Fredrick County Division of Fire and Rescue Services.

(E) If for a period of 6 months, the solar facility ceases to generate electricity or is disconnected from the electric grid, the approval will terminate. The property owner shall remove the solar facility within 90 days after termination. The property owner shall ensure the solar facility removal and disposal by posting an acceptable monetary guarantee with the County on forms provided by the office of the Zoning Administrator. The guarantee shall be for an amount equal to a cost estimate approved by the Zoning Administrator for the removal and disposal of the solar facility, plus a 15% contingency. If a guarantee for the cost of removal and disposal of the solar facility is required by and provided to a state entity, the Zoning Administrator may accept documentation of the posting of the guarantee with the state entity as satisfaction of this requirement.

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DIVISION 7. SOLAR FACILITY, COMMERCIAL FLOATING ZONE DISTRICT

1-19-10.700. SOLAR FACILITY – COMMERCIAL FLOATING ZONE DISTRICT

(A) Solar facility, Commercial shall be a floating zone which may be established within the Agricultural zone having the corresponding Comprehensive Plan land use designation. Commercial Solar facilities can play an important role by providing alternative energy sources, however because of their size, scale and intensity these commercial facilities may create adverse impacts on nearby properties and the adversely affect the rural and scenic characteristics of agricultural areas. Review and siting of these facilities through a floating zone process will maintain the purpose and protect the character of agricultural areas.

(B) Size and location.

(1) The tract or tracts of land eligible to receive the Solar Facility- Commercial District must be zoned Agriculture and have a Comprehensive Plan land use designation of agricultural/rural.

(2) The tract or tracts of land which is the subject of the floating zone application may not be contiguous to a community growth boundary as designated on the County Comprehensive Plan. (For purposes of this subsection, a property separated from a community growth boundary by a transportation or utility right of way (whether fee simple or lesser interest) is deemed to be contiguous as if such right of way did not exist.)

(3) The tract or tracts of land which is the subject of the floating zone application shall have a minimum size of 10 acres and shall not exceed 750 acres.

(4) The tract or tracts of land which is the subject of the floating zone application may not be encumbered by an Agricultural Preservation Easement, located within a Priority Preservation Area (PPA) or a Rural Legacy Area (RL) in the County Comprehensive Plan, or be located within two (2) miles of the centerline of the right-of-way of U.S. Route 15, outside the Frederick City limits from the Pennsylvania border to the Virginia border, that Route having been designated as part of the Journey Through Hallowed Ground National Heritage Area. If the tract or tracts of land subject to the floating zone application are within two (2) miles of the centerline of U. S. Route 15, the application may be conditionally accepted and the applicant will have the burden to establish that the proposed project will not be visible from U.S. Route 15.

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(C) Approval Criteria

(1) Approval or disapproval of an application for a Solar Facility-Commercial Floating Zone shall be determined through evaluation of the impact of the proposed project upon the adjacent and nearby properties and whether the project will be compatible with, and have no adverse effects on, surrounding properties and a viewscapes from public parks and roadways.

(2) The applicant shall establish that the site is the optimal location for a commercial solar project due to its proximity to facilities to connect the project to the grid, and that the natural features of the site and the location minimize the visual impact of the project on surrounding properties and those traveling on public roadways.

(3) The applicant shall establish that the proposed project will be compatible with the existing and customary uses on adjoining and neighboring properties and in the Agriculture zone in terms of size, scale, style and intensity.

(4) The applicant shall establish that the project will not be located on prime farmland soils as identified in the USDA Soil Survey for Frederick County.

(5) The proposed project, including all areas of disturbance, shall not exceed the lesser of 10% of the tract's or tracts' tillable acreage or 75 acres in size.

(6) A 25 foot deep buffering and screening area shall be provided along common property lines between the Solar Facility and all adjoining residentially zoned property and along all adjacent roadways. The buffering and screening area may include a combination of berms, predominantly evergreen species at least 5 feet in height at the time of planting, or fencing to be determined by the County Council based on characteristics of both the solar facility location and the surrounding neighborhood. The County Council may increase the 25 foot buffering and screening area depth based on characteristics of both the solar facility location and the surrounding neighborhood. The buffering and screening area may be located within the setback areas.

(7) Applicants must satisfy all Forest Resource Ordinance requirements and environmental regulations set forth in Article IX of the Zoning Ordinance. (Chapter 1-19.)

(8) The applicant must comply with all applicable federal and state regulations, including but not limited to obtaining a certificate of public convenience and necessity from the

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Public Service Commission if required, and in the removal and disposal of the solar facility and all of its components.

(9) All solar facilities and panel disconnects must be mapped and registered with the Fredrick County Division of Fire and Rescue Services.

(10) If for a period of 6 months, the solar facility ceases to generate electricity or is disconnected from the electric grid, the approval will terminate. The property owner shall remove the solar facility within 90 days after termination. The property owner shall ensure the solar facility removal and disposal by posting an acceptable monetary guarantee with the County on forms provided by the office of the Zoning Administrator. The guarantee shall be for an amount equal to a cost estimate approved by the Zoning Administrator for the removal and disposal of the solar facility, plus a 15% contingency. If a guarantee for the cost of removal and disposal of the solar facility is required by and provided to a state entity, the Zoning Administrator may accept documentation of the posting of the guarantee with the state entity as satisfaction of this requirement.

(11) If approval of the application is granted it may include conditions and restrictions deemed necessary to fulfill these criteria and to protect the intent of the agricultural/rural land use designation.

(D) Application and Approval.

(1) Prior to submitting an application for the floating zone, the applicant shall publicize the proposed application using a block advertisement of a size acceptable to staff including a map showing the site and a one-mile radius. The applicant shall hold a meeting in the area of the proposed facility to provide information to the members of the surrounding community regarding potential impacts of the project. Written notice of the meeting shall be provided to all abutting property owners and any homeowners/community associations within a one-mile radius of the property. Minutes of the meeting and a list of attendees shall be submitted with the floating zone application.

(2) Phase I justification and floating zone reclassification application and procedures will be the same as established in §§1-19-3.110.1 through 1-19-3-110.6.

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(3) Phase II approval shall follow the site development plan process. If the tract or tracts of land are granted floating zone approval they may not be further subdivided.

(E) Application.

(1) The application submitted must include 15 copies of each of the following:

(a) A map of the applicant's entire holding at a convenient scale.

(b) A vicinity map at a scale of 1 inch equals 2,000 feet or more to the inch, indicating the location of the property with respect to surrounding property and streets. The map will show all streets and highways within 2,000 feet of the applicant's property.

(c) An environmental features map of the property showing the existing surface of the land and the location of soil types and natural features such as streams, rock outcrops and wooded areas, at a minimum of 5 foot contour intervals, unless otherwise specified.

(d) A generalized overall land use plan at 1" = 100 scale, showing the type, location, acreage and density of all proposed land uses as well as the general street layout and circulation pattern.

(e) A concept plan at 1" = 50 scale showing; the location of the proposed use, size and height of all existing and proposed buildings; the location of all roads, parking lots, loading areas and access and egress drives.

(f) A phasing schedule describing the timing and sequence of development.

(g) A "glint and glare" analysis of the proposed solar facility identifying the angle and height of reflection throughout the year, and the impacts upon nearby residences, roadways, and airports.

(2) The applicant shall submit a justification statement addressing each of the approval criteria as well as the following:

(a) Relationship of uses within the project and with existing uses in the neighborhood;

(b) The timing of the construction of the project as it relates to the provision of facilities and services;

(c) A statement identifying all incidental accessory uses and activities associated with the primary use of the property including hours of operation, frequency of activity, and average number in attendance.

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1-19-10.900. INSTITUTIONAL FLOATING ZONING DISTRICT (I)

* * *

(F) Land use. Land uses permitted within the Institutional Zoning District are limited to the following:

(1) Public Airports

(2) College or university

(3) [Solar array approved as a nongovernmental utility] A Solar Facility, Accessory or Solar Facility, Community Energy Generating System in conjunction with a college or university

(4) Private School

(5) Public School

(6) Accessory uses shall be limited to those deemed to be incidental accessory uses associated with an institutional use as provided within this chapter (see also § 1-19-10-900(H)(1)(a) and (b), and Article VIII, Division 2. Accessory Uses) or as approved by the Zoning Administrator.

* * *

1-19-11.100. DEFINITIONS.

* * *

NONGOVERNMENTAL UTILITIES. Any utility not owned by a governmental entity. Including a transmission and distribution substation for supplying electric service served by transmission lines of less than 500 kv[.], but excluding Solar Facility, Commercial.

* * *

[***SOLAR ARRAY.*** A ground mounted solar collection system consisting of a linked series of photovoltaic modules.

SOLAR COLLECTION SYSTEM. A panel or other solar energy device, the primary purpose of which is to provide for the collection, inversion, storage, and distribution of solar energy for electricity generation, space heating, space cooling or water heating.]

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SOLAR FACILITY, ACCESSORY. A photovoltaic solar energy system mounted on a building or on the ground which generates electricity in an amount that does not exceed two hundred percent of the electric consumption of the principal use.

SOLAR FACILITY, COMMERCIAL. A photovoltaic solar energy system that generates electricity in an amount that exceeds two hundred percent of the consumption of the uses on the parcel upon which it is constructed and the excess electricity is fed into the electric grid.

SOLAR FACILITY, COMMUNITY ENERGY GENERATING SYSTEM. A photovoltaic solar energy system which satisfies the requirements of Public Utilities Article, §7-306.2 of the Ann. Code of Md.

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