

FREDERICK COUNTY PLANNING COMMISSION
February 15, 2017 7:00 p.m.

TITLE: Solar Collection Systems

FILE NUMBER: N/A

REQUEST: Bill 17-01 Solar Collection Systems Public Hearing

PROJECT INFORMATION: N/A

APPLICANT/REPRESENTATIVES: N/A

STAFF: Steve Horn, Director, Planning & Permitting Division

RECOMMENDATION: That the Planning Commission provide a recommendation to the Frederick County Council regarding the Text Amendment.

ATTACHMENTS:

Exhibit 1 – Frederick County Code, Chapter 1-19 Sections 5.310, 6.100, 9.205.4, 8.205.5, 8.335, 11.100



FREDERICK COUNTY GOVERNMENT
DIVISION OF PLANNING & PERMITTING

Jan H. Gardner
County Executive

Steven C. Horn, Division Director

To: Frederick County Planning Commission

From: Steven C. Horn, Director, Planning & Permitting Division

Date: January 30, 2017

Re: Bill 17-01 Solar Collection Systems

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

Issue:

Frederick County Planning Commission review and recommendation regarding Bill 17-01, including: deleting existing provisions; adopting new provisions related to Solar Collection Systems; proposing new provisions defining three categories of solar energy systems; identifying Zoning districts within which the solar energy systems may be located; and, establishing certain other criteria related there to.

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, Accessory; Solar Facility, Community Energy Generating System; and Solar Facility, Commercial.

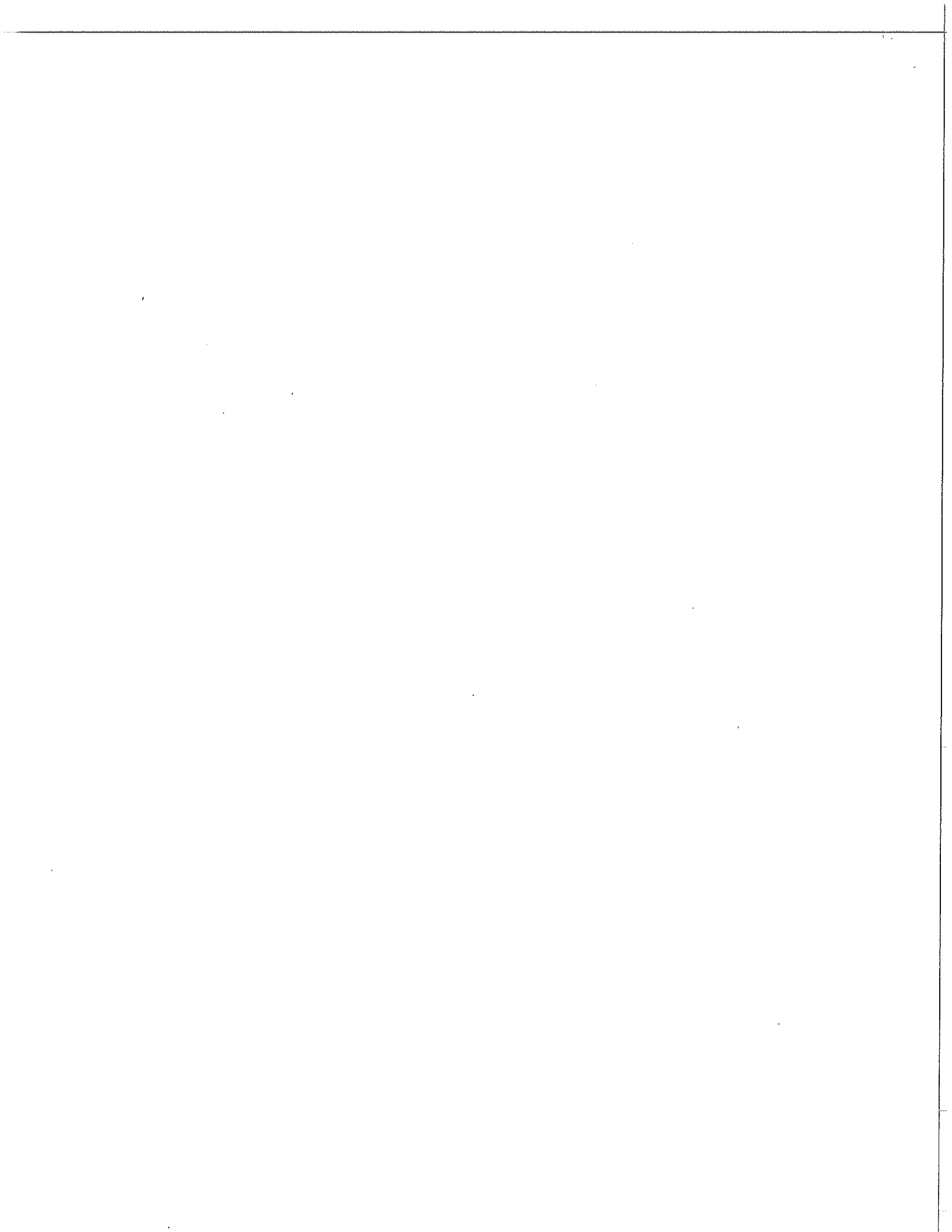
The "Solar Facility, Accessory" is proposed as an accessory use in all Zoning districts. Facilities may be mounted on a building or on the ground, and may be sized to generate not more than 200 % of the electric consumption of the principal use on the parcel.

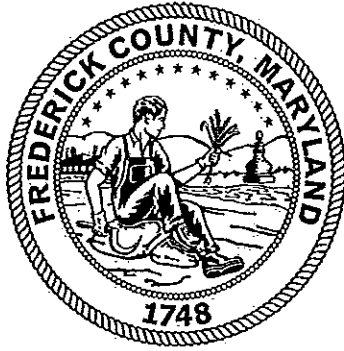
"Solar Facility, Community Energy Generating System" as proposed in the Bill, will comply with the requirements of the Public Utilities Art. §7-306.2, of the Ann. Code of Maryland, allowed as an accessory use in all Zoning districts with site plan review, and may be located on a separate parcel of land than that of subscribers. Under the State Code, the generating capacity of Community Energy Systems is limited to not more than 2 megawatts.

The Bill would allow "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."

A “Solar Facility, Commercial” would also be allowed in the Agricultural (A) zone by “special exception with site development plan approval” subject to certain restrictions such as setbacks, screening from adjoining properties zoned residential, and facility size shall not exceed 75 acres.

Prior to filing, an applicant for special exception approval in the Agricultural zone will also be required to notify abutting property owners and hold an informational meeting. A property owner who receives special exception approval will be required to comply with all applicable federal and state regulations to ensure removal of the solar facility after the facility ceases to generate electricity or is disconnected from the grid.





Bill No. _____

Concerning: Solar Collection Systems

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, and establishing 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, 11.100

Other: _____

Boldface	<i>Heading or defined term.</i>
<u>Underlining</u>	<i>Added to existing law by original bill.</i>
[Single boldface brackets]	<i>Deleted from existing law by original bill.</i>
<u>Double underlining</u>	<i>Added by amendment.</i>
[[Double boldface brackets]]	<i>Deleted from existing law or the bill by amendment.</i>
***	<i>Existing law unaffected by bill.</i>

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, and establishing 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

	<i>Zoning Districts</i>													
<i>Uses</i>	<i>RC</i>	<i>A</i>	<i>RI</i>	<i>R3</i>	<i>R5</i>	<i>R8</i>	<i>RI2</i>	<i>RI6</i>	<i>VC</i>	<i>MX</i>	<i>GC</i>	<i>ORI</i>	<i>LI</i>	<i>GI</i>
<i>Governmental and Nongovernmental Utilities</i>														
<u>Solar Facility, Commercial</u>		<u>E</u>											<u>PS</u>	<u>PS</u>

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

<i>Use Classification</i>	<i>Minimum Lot Area</i>	<i>Minimum Lot Area per Unit</i>	<i>Lot Width</i>	<i>Front Yard</i>	<i>Side Yard</i>	<i>Rear Yard</i>	<i>Height</i>
<i>Agricultural District A</i>							
<u>Solar Facility, Commercial</u>	<u>10 acres</u>		<u>300</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>20'</u>
<i>Limited Industrial District LI</i>							

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<u>Solar Facility, Commercial</u>	<u>20,000</u>		<u>200</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>30'</u>
<i>General Industrial District GI</i>							
<u>Solar Facility, Commercial</u>	<u>1acre</u>		<u>200</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>30'</u>

1-19-8.205.4. [SOLAR COLLECTION SYSTEM.] SOLAR FACILITY, ACCESSORY.

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

1-19-8.205.5. [SOLAR ARRAY.] SOLAR FACILITY, COMMUNITY ENERGY GENERATING SYSTEM.

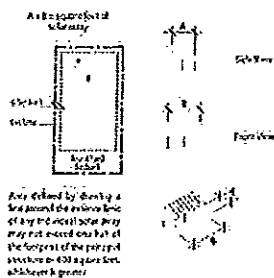
[The footprint of the solar array and any individual component shall be used in calculating the square footage by drawing a line around the exterior limits of an individual solar array. Solar arrays are permitted in any zoning district subject to the following setback and size restrictions:

(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.]

[



Solar Array

]

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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.

1-19-8.335. SOLAR FACILITY, COMMERCIAL IN THE AGRICULTURAL DISTRICT.

The following provisions shall apply to a Solar Facility, Commercial, in the Agricultural district.

(A) 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.

(B) Prior to submitting an application, 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.

(C) The property upon which the solar facility will be located may not be encumbered by an Agricultural Preservation Easement, designated as being within a Priority Preservation Area (PPA) or a Rural Legacy Area (RL) in the County Comprehensive Plan, or be located within five (5) 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.

(D) The solar facility shall not exceed the lesser of 10% of the parcel's tillable acreage or 75 acres in size.

(E) 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 Board of Appeals based on characteristics of both the Solar Facility location

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and the surrounding neighborhood. The Board of Appeals may increase the 25 foot buffering and screening area depth based in characteristics of both the Solar Facility location and the surrounding neighborhood. The buffering and screening area may be located within the setback areas.

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

(G) The applicant shall provide a “glint and glare” analysis of the proposed Solar Facility identifying the angle and height reflection throughout the year, and the impacts upon nearby residences, roadways, and airports.

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

(I) 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.

* * *

1-19-11.100. DEFINITIONS.

* * *

[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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PUBLIC UTILITIES
DIVISION I. PUBLIC SERVICES AND UTILITIES
TITLE 7. GAS, ELECTRIC, AND WATER COMPANIES
SUBTITLE 3. CONSUMER RELATIONS

Md. PUBLIC UTILITIES Code Ann. § 7-306.2 (2016)

§ 7-306.2. Community Solar Energy Generating Systems Pilot Program

(a) Definitions. --

(1) In this section the following words have the meanings indicated.

(2) "Baseline annual usage" means:

(i) a subscriber's accumulated electricity use in kilowatt-hours for the 12 months before the subscriber's most recent subscription; or

(ii) for a subscriber that does not have a record of 12 months of electricity use at the time of the subscriber's most recent subscription, an estimate of the subscriber's accumulated 12 months of electricity use in kilowatt-hours, determined in a manner the Commission approves.

(3) "Community solar energy generating system" means a solar energy system that:

(i) is connected to the electric distribution grid serving the State;

(ii) is located in the same electric service territory as its subscribers;

(iii) is attached to the electric meter of a subscriber or is a separate facility with its own electric meter;

(iv) credits its generated electricity, or the value of its generated electricity, to the bills of the subscribers to that system through virtual net energy metering;

(v) has at least two subscribers;

(vi) does not have subscriptions larger than 200 kilowatts constituting more than 60% of its subscriptions;

(vii) has a generating capacity that does not exceed 2 megawatts as measured by the alternating current rating of the system's inverter; and

(viii) may be owned by any person.

(4) "Program" means the Community Solar Energy Generating Systems Pilot Program.

(5) "Subscriber" means a retail customer of an electric company that:

(i) holds a subscription to a community solar energy generating system; and

(ii) has identified one or more individual meters or accounts to which the subscription shall be attributed.

(6) "Subscriber organization" means:

(i) a person that owns or operates a community solar energy generating system; or

(ii) the collective group of subscribers of a community solar energy generating system.

(7) "Subscription" means the portion of the electricity generated by a community solar energy generating system that is credited to a subscriber.

(8) "Unsubscribed energy" means any community solar energy generating system output in kilowatt-hours that is not allocated to any subscriber.

(9) "Virtual net energy metering" means measurement of the difference between the kilowatt-hours or value of electricity that is supplied by an electric company and the kilowatt-hours or value of electricity attributable to a subscription to a community solar energy generating system and fed back to the electric grid over the subscriber's billing period, as calculated under the tariffs established under subsection (e)(2) of this section.

(b) Legislative findings. -- The General Assembly finds that:

(1) community solar energy generating systems:

(i) provide residents and businesses, including those that lease property, increased access to local solar electricity while encouraging private investment in solar resources;

(ii) enhance continued diversification of the State's energy resource mix to achieve the State's renewable energy portfolio standard and Greenhouse Gas Emissions Reduction Act goals; and

(iii) provide electric companies and ratepayers the opportunity to realize the many benefits associated with distributed energy; and

(2) it is in the public interest that the State enable the development and deployment of energy generation from community solar energy generating systems in order to:

(i) allow renters and low-income and moderate-income retail electric customers to own an interest in a community solar energy generating system;

(ii) facilitate market entry for all potential subscribers while giving priority to subscribers who are the most sensitive to market barriers; and

(iii) encourage developers to promote participation by renters and low-income and moderate-income retail electric customers.

(c) Status of community solar energy generating system. -- A community solar energy generating system, including a subscriber or subscriber organization associated with the community solar energy generating system, is not:

- (1) an electric company;
- (2) an electricity supplier; or
- (3) a generating station.

(d) Commission to establish pilot program. --

(1) (i) The Commission shall establish a pilot program for a Community Solar Energy Generating System Program.

(ii) The structure of the pilot program is as provided in this subsection.

(2) All rate classes may participate in the pilot program.

(3) Subscribers served by electric standard offer service and electricity suppliers may hold subscriptions to the same community solar energy generating system.

(4) A subscriber organization shall:

(i) determine how to allocate subscriptions to subscribers; and

(ii) notify an electric company and, if applicable, a relevant electricity supplier about the regulations the Commission adopts under subsection (e) of this section.

(5) An electric company shall use the tariff structure under subsection (e)(2) of this section to provide each subscriber with the credits.

(6) A subscriber may not receive credit for virtual net excess generation that exceeds 200% of the subscriber's baseline annual usage.

(7) Any unsubscribed energy generated by a community solar energy generating system that is not owned by an electric company shall be purchased under the electric company's process for purchasing the output from qualifying facilities at the amount it would have cost the electric company to procure the energy.

(8) An electric company shall use energy generated from a community solar energy generating system to offset purchases from wholesale electricity suppliers for standard offer service.

(9) All costs associated with small generator interconnection standards under COMAR 20.50.09 are the responsibility of the subscriber organization.

(10) A subscriber organization may petition an electric company to coordinate the interconnection and commencement of operations of a community solar energy generating system after the Commission adopts regulations required under subsection (e) of this section.

(11) A subscriber organization may contract with a third party for the third party to finance, build, own, or operate a community solar energy generating system.

(12) A municipal utility or cooperative utility may participate in the pilot program.

(13) Equipment for a community solar energy generating system may not be built on contiguous parcels of land unless the equipment is installed only on building rooftops.

(14) The pilot program shall:

(i) begin on the earlier of:

1. the date of submission of the first petition of a subscriber organization under paragraph (10) of this subsection after the Commission adopts the regulations required under subsection (e) of this section; or

2. 6 months after the Commission adopts those regulations; and

(ii) end 3 years after the beginning date.

(15) The Commission shall limit the pilot program in such a way that the Commission may conduct a meaningful study of the pilot program and its results, including:

(i) the appropriate number of community solar energy generating systems to be included in the pilot program;

(ii) the appropriate amount of generating capacity of the community solar energy generating systems to be included in the pilot program; and

(iii) a variety of appropriate geographical areas in the State for locating community solar energy generating systems to be included in the pilot program.

(e) Regulations. -- On or before May 15, 2016, the Commission shall adopt regulations to implement this section, including regulations for:

(1) consumer protection;

(2) a tariff structure for an electric company to provide a subscriber with the kilowatt-hours or value of the subscriber's subscription, as the Commission determines;

(3) a calculation for virtual net energy metering as the Commission determines;

(4) a protocol for electric companies, electricity suppliers, and subscriber organizations to communicate the information necessary to calculate and provide the monthly electric bill credits and yearly net excess generation payments required by this section; and

(5) a protocol for a subscriber organization to coordinate with an electric company for the interconnection and commencement of operations of a community solar energy generating system.

(f) Continuation of contracts and systems entered during pilot program. --

(1) Subject to regulations or orders of the Commission, a contract relating to a community solar energy generating system or subscriber organization that is entered into during the pilot program shall remain in effect according to the terms of the contract, including after the termination of the pilot program.

(2) After termination of the pilot program, in accordance with the operational and billing requirements in subsection (d) of this section:

(i) a subscriber organization may continue the operation of a community solar energy generating system that began operation during the pilot program, including the creation and trading of subscriptions; and

(ii) in accordance with the tariffs established under subsection (e)(2) of this section, an electric company shall continue to facilitate the operation of a community solar energy generating system that began operation during the pilot program.

(g) Net metering project limitations. -- The cumulative installed nameplate capacity under the pilot program shall count toward the overall limitation of 1,500 megawatts for all net metering projects in § 7-306(d) of this subtitle.

HISTORY: 2015, chs. 346, 347.