An Act Relating to the Establishment of a Community Solar Program

For Restructured States

Whereas, solar energy is an abundant, domestic, renewable, and non-polluting energy resource.

Whereas, local solar energy generation can contribute to a more resilient grid, and defer the need for costly new transmission and distribution system build out.

Whereas, community solar can provide access to local, affordable, and clean energy options to all energy customers.

Whereas, community solar provides consumers including homeowners, renters, and businesses access to the benefits of local solar energy generation, unconstrained by the physical attributes of their home or business, like roof space, shading, or ownership status.

Whereas, community solar programs empower consumers with additional energy choices.

Whereas, community solar programs can also expand access to solar energy to low-income households.

Whereas, community solar can foster economic growth as well as opportunities for competition and innovative business models.

Whereas, the deployment of solar energy facilities including community solar can reduce the cost of energy for consumers, while lowering carbon emissions and reducing fossil fuel consumption in [State].

Whereas, it is the intent of [State] to expand the state's energy innovation and provide its residents with access to community solar, therefore, 1

Be it enacted by the [General Assembly of the State], that the Laws of [State] be amended to read:

Section 1. Definitions

The definitions in this section apply throughout this Act.

1. "Applicable Bill Credit Rate" means the dollar-per-kilowatt-hour rate as determined by the [Public Utilities Commission] used to calculate a Subscriber's Bill Credit. The Applicable Bill Credit Rate(s) shall be set such that the Community Solar Program is

¹ Stakeholders or legislators should modify the Preamble to express policy goals, or in consideration of existing market and political conditions.

- able to meet the policy goals of this Act, resulting in robust project development and Community Solar Program access for all customer classes.²
- "Bill Credit" means the monetary value of the electricity (in kilowatt-hours) generated by the Community Solar Facility allocated to a Subscriber to offset that Subscriber's electricity bill.
- 3. "Community Solar Facility" means a facility that generates electricity by means of a solar photovoltaic device whereby Subscribers receive a Bill Credit for the electricity generated in proportion to the size of their Subscription. A Community Solar Facility is a facility that:
 - a. Is located in the service territory of the Electric Distribution Company submitting compliance filings under Section 3 of this Act;
 - b. Is connected to the electric distribution grid serving the state;³
 - c. Has at least 3 Subscribers;
 - d. Has at least [Percentage] of its capacity subscribed by customers with Subscriptions of 25 kilowatts or less;⁴
 - e. Is located on a single parcel of land.
- 4. "Community Solar Program" or "Program" means the program created through the adoption of rules to allow for the development of Community Solar Facilities described in Section 3 of this Act.
- 5. "Electric Distribution Company" means an entity that physically transmits or distributes electricity in the State to a retail electric customer.⁵
- 6. "Electricity Supplier" means an entity that sells electricity, electricity supply services, competitive billing services, or competitive metering services and purchases electricity for sale to a retail electric customer.⁶

³ Requiring that the system be connected to the distribution grid effectively limits the maximum size of the system. Stakeholders or legislators might consider a system size cap due to local circumstances in order to balance benefits of economies of scale with distribution grid limitations and land use considerations.

² While a standard credit rate is helpful for Program simplicity, the Commission may wish to establish a different Applicable Bill Credit Rate for different customer classes if necessary to achieve policy goals. See Addendum B for guidance on Credit Rate Principles.

⁴ This provision ensures participation of small customers (e.g., residential and small commercial customers). The required minimum percentage for customers with Subscriptions of 25 kW or less should be set taking into account the percentage of the total customer base and electric load represented by residential and small commercial customers, as well as the availability of other solar and renewable energy options for different customer classes. Alternatively, in place of a per-project participation requirement, the legislation could prescribe an target percentage of overall Program capacity intended to be subscribed by small customers, and implement a mechanism(s) such as a Bill Credit adder to achieve the participation target. While this approach has not yet been proven to be effective, some states are considering it and more data may become available over time.

⁵ Replace with the appropriate term and definition for distribution utilities in the state.

- "Low-Income Customer" means an individual or household with an income of not more than 80 percent of the area median income based on United States Department of Housing and Urban Development guidelines.
- 8. "Low-Income Service Organization" means an organization or nonprofit whose primary function is to provide services or assistance to low-income individuals.⁸
- 9. "Subscriber" means a retail electric customer of an Electric Distribution Company who owns one or more Subscriptions of a Community Solar Facility interconnected with that Electric Distribution Company. A Subscriber must be located in the same Electric Distribution Company service territory where the Community Solar Facility is located.
- 10. "Subscriber Organization" means any for-profit or nonprofit entity that owns or operates one or more Community Solar Facilities. A Subscriber Organization shall not be considered an Electric Distribution Company or Electricity Supplier solely as a result of its ownership or operation of a Community Solar Facility.
- 11. "Subscription" means a contract between a Subscriber and the owner of a Community Solar Facility. A Subscription shall be sized such that the estimated Bill Credits do not exceed the Subscriber's average annual bill for the customer account to which the Subscription is attributed.⁹

Section 2. Program Administration

1. An Electric Distribution Company shall provide a Bill Credit to a Subscriber's subsequent monthly electric bill for the proportional output of a Community Solar Facility attributable to that Subscriber. The value of the Bill Credit for the Subscriber shall be calculated by multiplying the Subscriber's portion of the kilowatt-hour electricity production from the Community Solar Facility by the Applicable Bill Credit Rate for the Subscriber. Any amount of the Bill Credit that exceeds the Subscriber's monthly bill shall be carried over and applied to the next month's bill in perpetuity.

⁶ Replace with the appropriate term and definition for retail suppliers in the state.

⁷ Low-Income Customers can also be defined consistent with income criteria in existing state programs where such programs exist. Section 3 below for additional guidance.

⁸ The definition for Low-Income Service Organization can be modified to be consistent with relevant state statutes or regulations, or a similar term from the state's statutes can be used in place of Low-Income Service Organization.

⁹ It may be appropriate to limit a customer's Subscription using the same limitations applied to net metered customer generation facilities in the state. Limitations on Subscription sizes should be considered in conjunction with the Bill Credit methodology. In general, Subscriptions should be sized so that customers may fully offset their expected usage without accruing significant excess Bill Credits at the end of a year.

- 2. The Electric Distribution Company shall provide Bill Credits to a Community Solar Facility's Subscribers for not less than 25 years from the date the Community Solar Facility is first interconnected.
- 3. The Subscriber Organization shall, on a monthly basis and in a standardized electronic format, provide to the Electric Distribution Company a Subscriber list indicating the kilowatt hours of generation attributable to each of the retail customers participating in a Community Solar Facility in accordance with the Subscriber's portion of the output of the Community Solar Facility. Subscriber lists may be updated monthly to reflect canceling Subscribers and to add new Subscribers. The Electric Distribution Company must apply Bill Credits to Subscriber bills within one billing cycle following the cycle during which the energy was generated by the Community Solar Facility.
- 4. The Electric Distribution Company shall, on a monthly basis and in a standardized electronic format, provide to the Subscriber Organization a report indicating the total value of Bill Credits generated by the Community Solar Facility in the prior month as well as the amount of the Bill Credit applied to each Subscriber.
- 5. A Subscriber Organization may accumulate Bill Credits in the event that all of the electricity generated by a Community Solar Facility is not allocated to Subscribers in a given month. On an annual basis, the Subscriber Organization must furnish to the Electric Distribution Company allocation instructions for distributing excess Bill Credits to Subscribers.¹⁰
- All environmental attributes associated with a Community Solar Facility, including renewable energy certificates, shall be considered property of the Subscriber Organization. At the Subscriber Organization's discretion, those attributes may be distributed to Subscribers, sold, accumulated, or retired.

Section 3. Rule Adoption

- 1. The [Public Utilities Commission] shall establish by rule a Community Solar Program by [Date], and require each Electric Distribution Company to file any tariffs, agreements, or forms necessary for implementation of the Program.
- 2. Any rule or implementation filings approved by the [Public Utilities Commission] shall:
 - a. Reasonably allow for the creation and financing of Community Solar Facilities;
 - Allow all customer classes to participate in the Program, including customers on competitive supply service, and ensure participation opportunities for all customer classes;

¹⁰ Alternatively, replace this language with "An Electric Distribution Company shall credit a Subscriber Organization monthly for all Unsubscribed Energy generated by a Community Solar Facility at a rate equivalent to the Electric Distribution Company's avoided cost rate." where "Unsubscribed Energy" means "any Community Solar Facility system output in kilowatt hours that is not allocated to any Subscriber."

- c. Include one or more mechanisms sufficient to ensure accessibility for Low-Income Customers and Low-Income Service Organizations. The [Public Utilities Commission] should ensure that mechanisms targeted toward Low-Income Customers and Low-Income Service Organizations are crafted to achieve tangible economic benefits for Low-Income Customers and should integrate with existing complementary programs including but not limited to energy efficiency, energy assistance, and/or workforce development programs. In determining the appropriate mechanism(s), the [Public Utilities Commission], Electric Distribution Companies, and stakeholders should work with [appropriate state agencies] to consider the development of financing options, financial incentives, education and outreach programs, or appropriate Program participation goals or minimums:¹¹
- d. Shall not remove a customer from its otherwise applicable customer class in order to participate in a Community Solar Facility;
- e. Establish an initial capacity available under the Program of not less than [Percentage] of statewide peak demand based on the most recent full calendar year. The [Public Utilities Commission] shall approve additional Program capacity allocations as it deems appropriate;¹²
- f. Establish a protocol for Electric Distribution Companies and Subscriber Organizations to communicate the necessary information for calculating and providing Bill Credits;¹³
- g. Reasonably allow for the transferability and portability of Subscriptions, including allowing a Subscriber to retain a Subscription to a Community Solar Facility if the Subscriber moves within the same Electric Distribution Company territory;
- Establish uniform standards, fees, and processes for the interconnection of Community Solar Facilities that allow the Electric Distribution Company to recover reasonable interconnection costs for each Community Solar Facility;
- i. Provide for consumer protection in accordance with existing laws.
- Allow the Electric Distribution Company to recover reasonable costs of administering the Program;

¹¹ The Commission or a relevant state agency is best positioned to ensure access for Low-Income Customers and diverse participation; the responsibility for guaranteeing access should not be placed on the solar developer. See Addendum A for additional guidance and alternative language.

¹² It is not necessary to include a target Program size or an initial capacity, but releasing the Program in tranches can manage customer and developer expectations. In setting a target Program size, it is important to consider that community solar will be the only option for a majority of customers to participate directly in solar programs. In allocating additional capacity, the Commission should consider net customer and system benefits, and the ability to achieve other state policy goals.

¹³ Depending on current state billing protocols, the Commission and Electric Distribution Company may need to work with Electricity Suppliers to ensure Bill Credits are accurately reflected on Subscribers' bills, but in general, Electricity Suppliers will not have a role in providing Bill Credits to Subscribers. Further, additional provisions may be needed in this section of the legislation to address an Electric Distribution Company's default generation service procurement obligation, and whether such obligation may be reduced based upon the electricity delivered to the Electric Distribution Company's system from Community Solar Facilities.

- k. Ensure non-discriminatory and efficient requirements and Electric Distribution Company procedures for interconnecting projects;
- Address the colocation of two or more Community Solar Facilities on a single parcel of land, and provide guidelines for determining when two or more facilities are co-located;¹⁴
- m. Include a Program implementation schedule.
- Within 180 days of finalization of the [Public Utilities Commission]'s rules for the Community Solar Program, Electric Distribution Companies shall begin crediting Subscriber accounts of each Community Solar Facility interconnected in its service territory.

¹⁴ Ideally, the Community Solar Program should allow for viable system sizes to avoid the need for colocation. Co-location may be necessary in situations where system sizes are prohibitive to the efficient and cost-effective development of Community Solar Facilities.

Addenda

A. Options for Low-Income Participation Mechanisms

There are a number of barriers that make it more difficult for community solar programs to reach low-income customers, and supplemental policy mechanisms are generally required to achieve equitable opportunities for Low-Income Customers to participate.

Financing is currently the most significant barrier to inclusion of low-income customers: Third-party-owned projects are typically required to identify subscribers with good credit in order to access financing at a reasonable cost. For this reason, policy mechanisms that make low-income subscriptions financeable – such as a loan loss reserve, or having a public agency act as the counterparty for subscription agreements – are the most important. Other mechanisms such as program carve-outs or goals, and education and outreach can also promote Program accessibility for low-income customers.

The following options can be inserted into Section 3 Paragraph 2 of the legislation. For more examples and guidance, see 1. Low-Income Solar Policy Guide developed by GRID Alternatives, Vote Solar, and the Center for Social Inclusion, 2. Shared Renewable Energy for Low- to Moderate-Income Consumers: Policy Guidelines and Model Provisions developed by the Interstate Renewable Energy Council, 3. A Directory of State Clean Energy Programs and Policies for Low-Income Residents developed by Clean Energy States Alliance, and 4. Shared Renewable HQ, developed by Vote Solar.

Program or Incentive Type	Legislative Language	Notes
Financing	Include credit support mechanisms for Low-Income Customers such as loan loss reserves or other financing options. The [Public Utilities Commission] and Utilities should collaborate with [appropriate state agencies], financing agencies, or local governments to develop new programs or access existing programs.	Green banks, mission-driven financing entities, or local governments can collaborate to offer special financing options, serve as counterparties for subscription agreements, or serve as backstops for loans.
Financing	Include on-bill financing options for Low-Income Customers and Low-Income Service Organizations.	Existing regulations or programs may need to be modified to include subscription costs as eligible costs.
Education	Include a plan for directly engaging Low-Income Customers and Low- Income Service Organizations to participate in the development of the Community Solar Program and related	Customer awareness and education is a necessary component to guarantee participation.

	mechanisms.	
Siting Preference	Allow for siting preference to Community Solar Facilities dedicated to Low-Income Customers and Low- Income Service Organizations by exempting such Facilities from co- location requirements, and/or partnerships with local governments.	Reducing siting costs could lower overall project costs, in conjunction with other support mechanisms.
Carve-Out	Include a mechanism by which [Percentage] of the total generating capacity of the Community Solar Facilities operated under the Program will be made available for use by Low- Income Customers or Low-Income Service Organizations.	Appropriate percentage carve- outs may range from 5-10%. The percentage should be based on the percentage of load that serves low-income customers in the state. Note that a carve-out on its own will not succeed without sufficient policy mechanisms to overcome financing barriers.

B. Credit Rate Principles

The Applicable Bill Credit Rate set by the Act or the Commission should be:

- Simple. The Applicable Bill Credit Rate selected for Subscribers should be simple, meaning that it should be clearly understood by customers and Subscriber Organizations.
- 2. Adequate. The Applicable Bill Credit Rate must be set to ensure that all customer classes will have access to the Program, to ensure that projects will be developed under the Program, and to ensure those projects are financeable.
- 3. Fair. The Applicable Bill Credit Rate should not create perverse incentives for customers or result in a Program that is unsustainable.