



Community Shared Solar

Implementation Guidelines for Massachusetts Communities



Commonwealth of Massachusetts
Deval L. Patrick, Governor
Timothy P. Murray, Lieutenant Governor
Richard K. Sullivan Jr., Secretary

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About the Massachusetts Department of Energy Resources (DOER)

DOER's mission is to create a cleaner energy future for the Commonwealth, economically and environmentally, including:



- Achieving all cost-effective energy efficiencies;
- Maximizing development of cleaner energy resources;
- Creating and leading implementation of energy strategies to ensure reliable supplies and improve relative cost; and
- Supporting clean tech companies and spurring clean energy employment.

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About Cadmus

Covering the entire spectrum of energy, water, and sustainability consulting, The Cadmus Group, Inc., offers technical, policy, and managerial services to governments, utilities, and other businesses. Established in 1983, Cadmus is staffed with more than 400 full-time, professional consultants in offices across the United States. In the following areas, Cadmus supports a broad range of clients committed to improving the quality of life in the United States and worldwide:



- Energy
- Built Environment
- Natural Environment
- Climate
- Health.

Table of Contents

GLOSSARY OF TERMS.....	2
EXECUTIVE SUMMARY.....	5
SECTION 1: INTRODUCTION.....	9
Purpose and Organization.....	9
SECTION 2: OVERVIEW OF COMMUNITY SHARED SOLAR.....	11
What is Community Shared Solar?.....	11
Why Might Massachusetts Communities Be Interested in Community Shared Solar?.....	11
Who is Involved in a Community Shared Solar Project?.....	12
What are the Challenges to CSS?.....	13
How Can my Community Work around these Challenges to Implement a CSS Project?.....	13
SECTION 3: THE PUBLIC LEASE MODEL.....	15
What is the Public Lease Model for Community Shared Solar?.....	15
When is the Public Lease Model Appropriate?.....	16
What are the Roles and Relationships of the Parties under this Model?.....	16
Key Criteria and Considerations of the Public Lease Model.....	19
Implementing a CSS Project Under the Public Lease Model.....	21
Forming a Project Team.....	21
Starting a Local Dialogue.....	22
Identifying Potential CSS Project Sites.....	26
Estimating Costs and Benefits.....	28
The Procurement Process.....	37
Other Factors to Consider.....	38
SECTION 4: THE PARTICIPANT OWNERSHIP MODEL.....	43
What is the Participant Ownership Model for Community Shared Solar?.....	43
When is the Participant Ownership Model Appropriate?.....	44
What Are the Roles and Relationships of the Parties under this Model?.....	45
Key Criteria and Considerations of the Participant Ownership Model.....	47
Implementing a CSS Project Under the Participant Ownership Model.....	49
Forming a Project Team.....	50
Starting a Local Dialogue.....	52
Identifying Potential CSS Project Sites.....	54
Estimating Costs and Benefits.....	56
Without Virtual Net Metering Services.....	65
Forming a Business.....	66
Secure Lease Agreement and System Design, Installation, and Maintenance Contract.....	67
Other Factors to Consider.....	70
SECTION 5: CONCLUSIONS.....	73
SECTION 6: SAMPLE CONTRACT DOCUMENTS.....	77

GLOSSARY OF TERMS

- **Aggregator.** This is the entity that brings together the collective demand of the community shared solar project participants and administers the community shared solar project.
- **Community Shared Solar (CSS).** A solar photovoltaic (PV) system that provides benefits—such as electricity, net metering credits, and return on investment—to participants. A CSS project is hosted by an entity with a suitable roof or parcel of land and is supported by multiple participants, who invest in the project or purchase the electricity or net metering credits generated.
- **Energy Management Services (EMS).** As defined in M.G.L. c. 25A §11I, an EMS is a program of services, including energy audits, energy conservation measures, energy conservation projects or a combination thereof, and building maintenance and financing services, primarily intended to reduce the cost of energy and water in operating buildings, which may be paid for, in whole or in part, by cost savings attributable to a reduction in energy and water consumption which result from such services. (EMS is a type of energy saving performance contracting.) Public entities in Massachusetts can use M.G.L. c. 25A §11I to procure a Solar EMS contract for the lease of public space (such as a public school roof), PV system construction, and a power purchase contract through a single, streamlined solicitation process.”¹
- **Community Shared Solar Vendor.** A business or non-profit that is selected to develop and administer a CSS project.
- **Host Customer.** This is the entity named on the electric utility account as the party responsible for paying the bills for the utility meter associated with a specific CSS project. Host customers applying for net metering services complete a Schedule Z with the utility company, which directs the utility how to allocate net metering credits.
- **Investment Tax Credit (ITC).** The federal business energy investment tax credit (ITC) is a corporate tax credit for renewable energy technologies, including solar, fuel cell, small wind, geothermal, microturbines, and combined heat and power. For solar PV systems, the credit is equal to 30% of expenditures, with no maximum credit. The 30% ITC is available to eligible systems placed in service on or before December 31, 2016.
- **Modified Accelerated Cost-Recovery System (Accelerated Depreciation).** Under the federal accelerated depreciation incentive, businesses can recover investments in eligible property through depreciation deductions. Solar PV systems are eligible for a six-year accelerated depreciation schedule.

¹ Visit DOER’s EMS Website for more information: <http://www.mass.gov/eea/energy-utilities-clean-tech/green-communities/ems.html>.

- **Net Metering.** Net metering allows customers of Massachusetts' regulated utilities with eligible facilities to receive a credit from the utility company when the net metering facility produces more power than is needed at the project site. Excess power is exported to the electric grid, the utility meter effectively spins backward, and the customer is credited for the electricity delivered to the grid. Net metering credits can be applied to the host customer's account, or the host customer can allocate net metering credits to other utility accounts.
- **Net Metering Credit Allocation Agreement.** In this guide, this term is used to describe a long-term contract for the purchase of net metering credits from a solar PV system.
- **Participants.** These are the community members who participate in a CSS project by purchasing the energy or net metering credits generated from the solar PV system, or by taking an ownership stake in the project. Participants may be individuals or businesses.
- **Participant Ownership Model.** The Participant Ownership model for CSS projects is suitable for project organizers interested in developing a CSS project that is independent of a CSS vendor or facilitation by local government. Participants start a company, typically an LLC, and benefit from a return on their investment in the company. The key features of the Participant Ownership model are that private individuals drive the process and participants take an ownership stake in the project.
- **Passive Income.** Passive income comes from investments in trade or businesses activities in which the investor does not materially participate, or from rental activities even if the investor does participate. The investor may be either a natural person or a business. The ITC for commercial PV systems can only be credited against passive income. The now-expired 1603 U.S. Treasury grant program (1603 program) offered an alternative to the ITC in which the system owner received a check from the federal government equal to 30% of the cost of the project. No passive income was required in order to receive the grant.
- **Public Lease Model.** In the Public Lease model, municipalities or other public entities lease public roof space or land for a CSS project. A CSS vendor installs the PV system, establishes the CSS business set-up, and administers the project. The key features of the Public Lease model are twofold. The municipality drives the process and brings the competitive forces of the market to bear through the lease of public space; and participants' benefit by having net metering credits applied against their electric bills.
- **Securities.** A security is an investment instrument issued by a corporation, government, or other organization that offers evidence of debt or equity. A transaction that involves an investment of funds in an enterprise, with an expectation of profits to be earned through the efforts of someone other than the investor, is a transaction involving a security.

- **Schedule Z.** When submitting an interconnection application to the local utility company, host customers applying for net metering services must complete a Schedule Z. The Schedule Z directs the utility company how to allocate net metering credits.
- **Site Owner.** The owner of the property on which the CSS system is located.
- **Solar Carve-Out Program.** The Solar Carve-Out, a component of the Massachusetts Renewable Portfolio Standard, is a market-based incentive to support the development of solar PV across the Commonwealth. The Massachusetts Department of Energy Resources (DOER) has carved-out a portion of the RPS Class I Renewable Energy requirement to support distributed solar PV facilities, as provided by the Green Communities Act of 2008, with a goal of 400 MW. All regulated and competitive retail electricity suppliers that serve the Massachusetts load need SRECs to meet the RPS Solar Carve-Out compliance obligation (municipal utilities are exempt).
- **Solar Renewable Energy Credits (SRECs).** Electricity produced by solar PV systems qualified under the Solar Carve-Out is broken into two products: (1) the electricity production that is used on-site or delivered to the grid; and (2) the positive environmental attributes associated with this clean energy production. SRECs represent the second product. One SREC is created each time a solar PV system generates one megawatt-hour (1000 kilowatt-hours, kWh) of electricity. The Solar Carve-Out compliance obligation creates a market demand for SRECs.
- **System Owner.** This is the entity that owns the solar PV system in a CSS project.
- **Tax Equity Partner.** These are investors having a taxable passive income that allows them to take advantage of the ITC and depreciation losses available to investors in solar PV systems. Tax equity partners are typically businesses, and they may own all or part of the CSS project.
- **Virtual Net Metering.** When net metering credits are applied to electric utility accounts other than the host customer's on-site utility account, this is called virtual net metering. Virtual net metering allows PV generation in one location to offset electricity costs at another location. In this report, we use the term virtual net metering to describe scenarios in which a PV system is interconnected behind a new meter and the majority of electricity produced by the PV system is delivered to the electric grid.

Executive Summary

Through programs such as the Solar Carve-Out Program and the community-based Solarize Massachusetts program, solar photovoltaic (PV) installations have significantly increased in Massachusetts. Unfortunately, only a fraction of those who would like to install solar PV on their property can do so. For example, shading from trees can reduce the technical or economic feasibility of a solar PV installation.

Community Shared Solar (CSS) offers an alternative for those who cannot install solar on their property. In a CSS project, a PV system is hosted by an entity (either public or private) with a suitable roof or parcel of land. Participants in the CSS project, such as individuals and businesses, purchase net metering credits generated by the system, which lower their electric bills. Under some CSS models, participants may take an ownership stake in the project.

This comprehensive guide is intended as a resource for project organizers seeking to implement CSS projects in their community. It is designed to help Massachusetts' private citizens and public entities consider, plan, and implement CSS projects in their community.

What Is Community Shared Solar?

For purposes of this guide, CSS projects are defined as having the following attributes:

- One or more residential or business utility customers residing in the community must be participants in the project;
- Located in the territory of one of the Massachusetts investor-owned utilities;²
- Participants benefit from net metering credits generated by the PV system, which lower their electric bills, and/or receive a return on a financial investment in the project; and
- The site owner receives lease payments for hosting the PV system.



*Poudre Valley REA Community Solar
Farm Dedication Ceremony
(Aug. 28, 2012)*

Source: Clean Energy Collective, photo used with permission

² National Grid, NSTAR Electric Company, Until, and Western Massachusetts Electric Company

Executive Summary

Is Community Shared Solar Right for My Community?

To determine if a CSS project is right in your community, first identify the CSS business model that best fits the circumstances. To do so, consider the following questions:

- Is the site on which the PV system is to be installed owned by a private or public entity?
- Will the PV system be owned by a private or public entity?³

Based on the answers to these questions, identify the model most appropriate for your project using the Table A below.⁴

Table A: Public Lease and Participant Ownership Models

		Site Owner	
		Private Entity	Public Entity
PV System Owner	Private Entity	PARTICIPANT OWNERSHIP MODEL Private entity (e.g., LLC) is formed by a group of Participants for the purposes of developing a CSS project Private entity owns or leases property on which the PV system will be installed Participants realize a return on investment and benefit from net metering credits generated by the system	PUBLIC LEASE MODEL Public entity leases property to a private entity for the installation of the PV system Private entity owns and operates the PV system Participants benefit from net metering credits generated by the system
	Public Entity ⁵	NOT RECOMMENDED Due to MA Net Metering regulations, projects are limited to a capacity of 60 kW Public entity will need to serve as aggregator and execute net metering credit allocation agreements with participants Public entity cannot take advantage of the 30% Federal Investment Tax Credit (ITC)	NOT RECOMMENDED Due to MA Net Metering regulations, projects are limited to a capacity of 60 kW Public entity will need to serve as the aggregator and execute net metering credit allocation agreements with participants Public entity cannot take advantage of the 30% Federal Investment Tax Credit (ITC)

³ For purposes of this Executive Summary in describing CSS business models, it is assumed that the system owner also serves as the utility Host Customer for purposes of allocating net metering credits.

⁴ For reasons related to Massachusetts net metering regulations, as well as practical considerations concerning contractual complexity and risk, CSS projects in which the PV system is owned by a public entity are not recommended.

⁵ A public entity wishing to own a PV system will fall under the Public net metering cap in Massachusetts if the system capacity is over 60kW (AC capacity). Under the Public cap the public entity would not be able to distribute net metering credits to residential electric customers.

Executive Summary

The two most pragmatic models for implementing a CSS project in Massachusetts are the Public Lease model and the Participant Ownership model. Each model has distinct advantages and challenges. Iterations of these models have been used to develop CSS projects across the country.

What are the key attributes of the Public Lease model?

- *The CSS project is hosted on a public building or land*
- *Participants benefit from net metering credits, which reduce their electric bills*
- *The CSS project is facilitated by the public entity, but a competitively procured vendor administers the project*
- *The public entity receives lease payments from the system owner*

In the Public Lease model, a municipality or other public entity facilitates a CSS project by making public roof space or land available for a CSS project. A CSS vendor installs the PV system, establishes the CSS business set-up, and administers the project. The key features of the Public Lease model are twofold; the municipality drives the process and brings the competitive forces of the market to bear through the lease of public space, and participants benefit by having net metering credits applied against their electric bills. Section 3 of this guide contains steps to planning and implementing a CSS project following this model.

What are the key attributes of the Participant Ownership model?

- *Participants have an ownership stake in the CSS project*
- *Participants may realize a return on their investment and benefit from net metering credits, which reduce their electric bills*
- *Participants assume some financial risk*
- *Project organizers may need to form a company and navigate state and federal securities regulations*

Executive Summary

The Participant Ownership model is suitable for community members interested in developing a CSS project that is independent of a CSS vendor or facilitation by a public entity. Project organizers start a company, typically an LLC. Participants benefit from a return on their investment in the company. The key features of the Participant Ownership model are that private individuals drive the process and participants take ownership in the project. Section 4 of this guide contains steps to planning and implementing a CSS project following this model.

In the future, investment and financing vehicles, such as Master Limited Partnerships (MLPs), Real Estate Investment Trusts (REITs) and Crowd Funding (if and when these tools are available for CSS projects), may provide alternative and potentially easier means to implement CSS projects.

What Is the Payback Period For Participants?

Payback periods and CSS benefits for other projects will vary depending on project specifics. This document includes step-by-step guidance on estimating economic benefits under the Public Lease and Participant Ownership models. It is strongly recommended that CSS project organizers and advocates develop an understanding of a project's potential costs and benefits before implementing a project.



Source: Clean Energy Collective, photo used with permission

Section 1: Introduction

The Massachusetts Department of Energy Resources (DOER) and the Mass Solar: Making it EZ Team⁶ were awarded funds under the U.S. Department of Energy SunShot Initiative Rooftop Solar Challenge, which incentivizes 22 regional awardees to make it easier for Americans to go solar. By streamlining permit processes, updating planning and zoning codes, improving standards for connecting solar power to the electric grid, and increasing access to financing, teams will clear a path for rapid expansion of solar energy and serve as models for other communities across the nation. The Rooftop Solar Challenge is part of the SunShot Initiative, which strives to make solar cost-competitive with other forms of energy by the end of the decade.

In May 2012, DOER selected The Cadmus Group, Inc., to identify and assess the opportunities and barriers of implementing community shared solar (CSS) in Massachusetts. This work was conducted in two phases.

In the first phase, Cadmus conducted an analysis of existing CSS models, barriers, and local needs. Findings are provided in the report, “Community Shared Solar: Review and Recommendations for Massachusetts Models” (2013). In the second phase, Cadmus further developed the two business models, the Public Lease model and the Participant Ownership model, which are detailed in this guide.

Purpose and Organization

This guide is intended as a resource for project organizers seeking to implement CSS projects in their community. It is designed to help Massachusetts’ private citizens and public entities consider, plan, and implement CSS projects.

It is divided into two primary sections, each dedicated to a specific CSS business model. Section 3 details the Public Lease model, and Section 4 details the Participant Ownership model. Table 1 summarizes the basic criteria of each model. Project organizers should reference the section most applicable to their situation. Sample documents from existing CSS projects appear in Section 6.

⁶ In addition to DOER, the team consists of: (1) the municipalities of Boston, Cambridge, Harvard, Hatfield, and Winchester; (2) the Massachusetts Clean Energy Center (MassCEC); (3) the Solar Energy Business Association of New England (SEBANE); (4) the Massachusetts Board of Building Regulations and Standards (BBRS); and (5) MassDevelopment.

Introduction

Table 1: CSS Business Model Highlights by Section

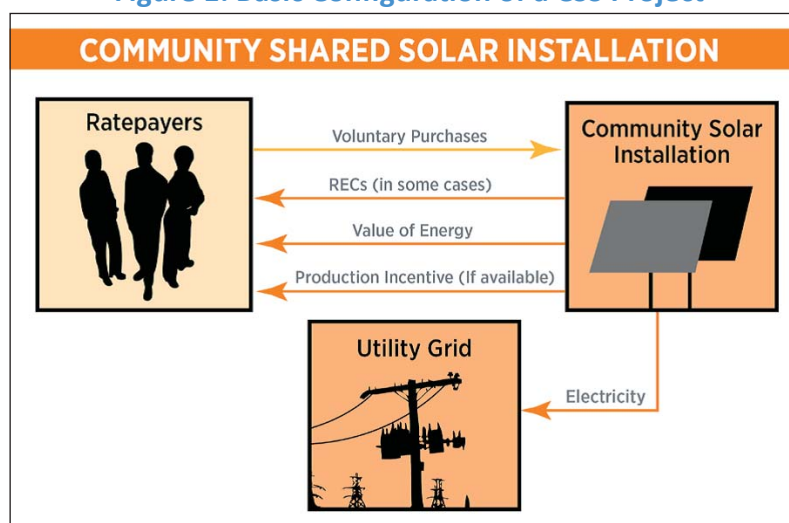
	Section 3	Section 4
	Public Lease Model	Private Ownership Model
Circumstances Where CSS Business Model is Appropriate	<ul style="list-style-type: none"> • Local officials aim to provide community members with access to solar PV through a CSS project • Public buildings or parcels are available and suitable to host a solar PV system • Project organizers want to take advantage of private-sector expertise and competition for participants' benefit • Project organizers have sufficient resources available to initiate and facilitate the CSS project (without having to build or operate it) 	<ul style="list-style-type: none"> • Does not require the participation of a municipality or other governmental entity or the availability of public space • Does not require the availability of virtual net metering, although this model can work well with virtual net metering • Subject to securities limitations regarding the number of investors and the marketing of the project
Information Provided in Sections 3 and 4	<ul style="list-style-type: none"> • Definitions of each CSS business model • Circumstances under which the model is appropriate for a given project • Steps to implementing CSS projects following the business model 	

Section 2: Overview of Community Shared Solar

What is Community Shared Solar?

In this guide, we define a CSS project as a solar PV project that provides benefits—such as electricity, net metering credits, and return on investment—to multiple participants (see Figure 1). A CSS project is hosted by an entity with a suitable roof or parcel of land. Participants, such as individuals and businesses, are typically motivated by an inability to install a solar PV system at their own home or business.

Figure 1: Basic Configuration of a CSS Project



Source: *A Guide to Community Shared Solar: Utility, Private, and Nonprofit Project Development.*
(U.S. Department of Energy)

Why Might Massachusetts Communities Be Interested in Community Shared Solar?

A 2008 National Renewable Energy Laboratory (NREL) study estimated that only 22% to 27% of residential buildings suitable for hosting a PV system.⁷ CSS project organizers can help open the solar market to those who rent or have site issues (structural instability, poor orientation, shading), or face other limitations to the installation of on-site solar PV.

⁷ Supply Curves for Rooftop Solar PV-Generated Electricity for the United States, National Renewable Energy Laboratory, Nov. 2008. www.nrel.gov/docs/fy09osti/44073.pdf. Accessed December 17, 2012.

Overview of Community Shared Solar

Who is Involved in a Community Shared Solar Project?

The **Site Owner** is the owner of the property on which the CSS system is located. The site owner may be a municipality, or other public entity, or a private party.

CSS project **Participants** are the community members and other parties who participate in a CSS project by purchasing the energy or net metering credits generated from the PV system or an ownership stake in the project. Participants may be individuals or businesses.

The **Aggregator** brings together the collective demand of the participants and administers the project. The aggregator also serves as the Host Customer, which is the entity named on the electric utility account associated with the CSS system. Host customers applying for net metering services complete a Schedule Z with the utility company, which directs the utility how to allocate net metering credits.

The **System Owner** owns the solar PV system. The system owner typically partners with a tax equity investor to monetize the ITC and other available tax incentives.

The **Tax Equity Partner** is an investor(s) with taxable passive income that is allowed to take advantage of the 30% ITC and other tax benefits available to investors in solar PV systems.



Clean Energy Collective's Garfield County Airport Community Solar Array, near Rifle, Colorado

Clean Energy Collective, photo used with permission

Overview of Community Shared Solar

What are the Challenges to CSS?

CSS project organizers may face various challenges, depending upon the model chosen, which include:⁸

- **Strain on Municipal Project Organizers.** Municipalities cannot directly take advantage of available tax incentives for solar PV, such as the ITC, and often may lack the resources and/or expertise to own or host a PV system.
- **Securities Requirements.** CSS models that involve an ownership stake by participants require consideration of complex U.S. Securities and Exchange Commission (SEC) requirements. Projects following this approach may require hundreds of hours of volunteer time and professional legal assistance.
- **Securing a Tax Equity Partner.** Securing a tax equity partner to take advantage of the significant tax benefits available for solar projects can be time-intensive and costly.
- **Custom Contract Documents Required.** Contract and lease terms can be time-intensive and costly to develop. These documents will vary by project, depending on the project configuration and the parties' needs and tolerance for risk. Section 6 of this report contains examples of contract documents from existing CSS projects.
- **Variations in Zoning and Permitting Requirements Across Jurisdictions.** Municipal zoning, permitting, and inspection processes vary by community, which can increase uncertainty for project developers.
- **Virtual Net Metering Limitations.** The aggregate capacity of net metering facilities in each utility company's service territory is capped by law, and these caps may be reached in the next few years.^{9,10}

How Can My Community Work Around These Challenges to Implement a CSS Project?

The two most pragmatic models for implementing CSS in Massachusetts in the near term work around these challenges in different ways. We call these models the Public Lease model (detailed in Section 3) and the Participant Ownership model (detailed in Section 4). Each has distinct advantages and challenges. Iterations of these models have been used to develop CSS projects across the country.

⁸ More information on the barriers to CSS are detailed in "Community Shared Solar: Review and Recommendations for Massachusetts Models" (2013).

⁹ For a review of limitations of net metering as applied to CSS projects see "Community Shared Solar: Review and Recommendations for Massachusetts Models" (2013).

¹⁰ The aggregate capacity of net metering facilities in each utility company's territory can be seen at www.MassACA.org

Overview of Community Shared Solar

Section 3: The Public Lease Model

In this section, we review the conditions under which using the Public Lease model is appropriate, the basic steps to implementing a CSS project following this model, and the roles and responsibilities of the parties under this model.

This section is intended for organizers of CSS projects facilitated by municipalities or other public entities.

What is the Public Lease Model for Community Shared Solar?

Under the Public Lease model, a municipality or other public entity facilitates a CSS project by making public roof space or land available for the project. A qualified CSS vendor is selected to develop and administer the CSS project. The aggregator (the CSS vendor itself, or an entity created by the CSS vendor, such as a cooperative) acts as the host customer of the PV system. The aggregator allocates net metering credits to participants' utility accounts, which decreases participants' electricity bills.

While the economic benefit to the municipality of hosting a CSS project will likely be less than that if the municipality were to execute a solar Energy Management Services (Solar EMS) contract, a CSS project following the Public Lease model can help local government meet community members' demand for solar PV.



Source: Clean Energy Collective, photo used with permission

The Public Lease Model

When is the Public Lease Model Appropriate?

The Public Lease model is appropriate where local officials:¹¹

- Aim to provide community members with access to solar PV through a CSS project;
- Can identify public buildings or parcels that are available and suitable to host a solar PV system;
- Want to take advantage of private-sector expertise and competition for participants' benefit; and
- Have sufficient resources available to initiate and facilitate the CSS project (without having to build or operate it).

What are the Roles and Relationships of the Parties under this Model?

We outline two approaches to the Public Lease model below. In one approach, the CSS vendor acts as the aggregator and host customer. In the second approach, the CSS vendor establishes another entity to act as the aggregator and host customer.

In each approach, the public entity is the site owner and leases out its buildings or land for the purposes of CSS. The public entity, such as a municipality, selects a qualified CSS vendor to develop and administer the CSS project. The municipality benefits from lease payments through a lease agreement, likely with the system owner. Through virtual net metering, electricity produced by the PV system is delivered directly to the grid and participants receive net metering credits on their bills in return for payments to the aggregator. More detail on the two approaches to Public Lease model is provided below.

¹¹ The availability of virtual net metering is integral to creating economic benefits for participants under this model. The Massachusetts legislature has established a cap on net metering services of 6% of each utility company's peak load (3% for private entities and 3% for public entities). The availability of net metering services is determined by the legislative mandate and the aggregate capacity of existing net metering projects. Net metering services will no longer be available when the aggregate capacity of net metering facilities reaches the 6% cap. For more on net metering policy in Massachusetts see the MA Department of Energy Resources' DG and Interconnection Website: <https://sites.google.com/site/mass-dgic/Home>. In the absence of net metering services, municipalities and other public entities may want to consider behind-the-meter solar EMS contracts.

The Public Lease Model

Benefits to the site owner (e.g., municipality) may include lease revenue, helping reduce participants' energy costs, meeting constituents' demand for CSS, and supporting public policy goals, including energy security and economic development.

Benefits to participants (e.g., residents) may include reduced electricity bills and a hedge against increasing energy costs.

CSS Vendor as Aggregator and Host Customer. In this approach, the CSS vendor itself administers the project, acts as aggregator and host customer, and procures a third-party to install and own the PV system (i.e., serve as the system owner). The aggregator enrolls participants and, as the host customer, assigns net metering credits to participants through net metering credit allocation agreements. The aggregator uses payments made by participants, which may be in the form of a one-time payment or on the basis of the quantity of net metering credits delivered to the participants, to pay the system owner for electricity generated by the PV system under a PPA.¹²

Third Party as Aggregator and Host Customer. In this approach, the CSS vendor acts as the developer, setting up the ownership entity for the project and creating a third-party, such as a cooperative, to administer the project (i.e., serve as the aggregator and host customer). The cooperative enrolls participants and, as the host customer, assigns net metering credits to participants through net metering credit allocation agreements.

From the municipality's perspective, these two approaches are no different. In both scenarios, the municipality is the site owner and receives a lease payment.



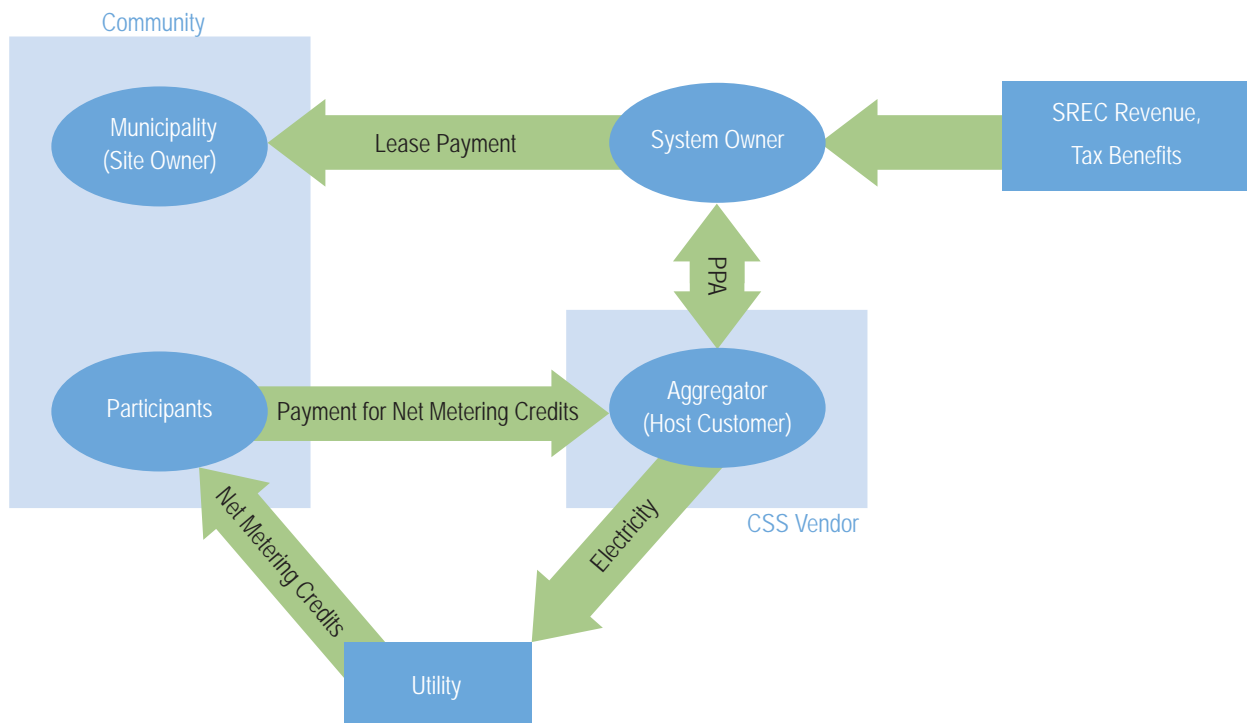
Colorado Springs Community Solar Farm

Source: Clean Energy Collective, photo used with permission

¹² The aggregator may pay the solar developer up front for installation of the system, may pay based on the energy generated by the PV system, or may pay through some combination of the two options.

The Public Lease Model

Figure 2: CSS Vendor as Aggregator and Host Customer



*Poudre Valley REA
Community Solar Farm*

Clean Energy Collective, photo used with permission

The Public Lease Model

Key Criteria and Considerations of the Public Lease Model

To maximize benefits to the municipality and participants, project organizers should consider the following:

- **Availability of Net Metering Services.**¹³ Virtual net metering allows PV generation in one location to offset electricity costs at other locations. In the Public Lease model, virtual net metering is the tool used to deliver economic benefit to participants. To receive net metering credits, participants must be within the same electric utility company service territory and ISO New England load zone as the CSS project.¹⁴ Before starting a project, it is prudent to look into the availability of net metering services for the cap under which a given project will fall.¹⁵
- **Local Staff Capacity.** While the Public Lease model relies heavily on private sector companies, facilitating this process will still require the commitment of the municipality. This guide should help familiarize local officials and staff with CSS projects. The most successful projects under the Public Lease model will have a champion within local government who has the time and the interest to drive the project forward.

*Clean Energy Collective
Community Solar Array*

*Garfield County Airport Community
Solar Array Near Rifle, Colorado*



Clean Energy Collective, photo used with permission

¹³ The Public Lease model requires virtual net metering, as participants benefit in the form of net metering credits applied against their electric bills.

¹⁴ Only investor-owned utilities in Massachusetts are required to offer virtual net metering. Municipal utilities are not required to provide net metering services.

¹⁵ The allocation of net metering credits to private residents and businesses will mean that CSS projects will fall into the private net metering cap (for a net metering facility to fall under the public cap, net metering credit allocations can be made only to other public entities). When the cap in a utility's territory is reached, net metering services for the cap type will no longer be available.

The Public Lease Model

- **Cost to the Site Owner.** Potential costs to the site owner include any due diligence to identify a potential site, RFP development and review costs (e.g., Town Counsel's fees), and staff time and owner's agent expertise to facilitate the project. Municipalities that facilitate CSS projects can help recoup their costs through lease payments from the system owner. An owner's representative may be helpful and/or necessary to maximize the economic benefits and minimize risks to local government and participants.
- **Benefits to the Site Owner.** In this model, the municipality (site owner) benefits from lease payments. The potential lease revenue from a CSS project model will vary, however, based on project site, size, participation rates, SREC and electricity market projections, the risks assumed by each party in the contract documents, and other factors. Each party's benefits are interrelated; the economic benefits for the community members, broadly, are divided between the site owner and participants. Project organizers should consider the potential for donations, volunteer support, and grants to maximize a project's economic benefits.

Municipal officials may also want to consider indirect economic benefits. For example, a CSS project represents an opportunity to provide a valuable resource, service, and jobs to the community at little or no cost to taxpayers.

- **Participant Payment Structure.** Participation is formalized through an agreement with the aggregator. Participants' payment structure may vary (e.g., up-front fee for percentage output from the system or a monthly fee calculated per kilowatt-hour generated). Upfront investment in a CSS project can lower the system owner's financing costs, which, in turn, benefits both participants and the municipality. An up-front fee, however, may be cost-prohibitive to some prospective participants.
- **Transfer of Benefits to Another Account, Location, or Participant.** Participants moving outside of the electric company service territory and ISO-New England load zone will no longer be able to receive net metering credits, and they should work with the aggregator to understand their options. If their participant agreement permits, participants that relocate, or otherwise want to end their involvement with the project, may be able to transfer their obligations to another utility customer.

Participants relocating within the electric utility company's service territory and ISO-New England load zone that wish to continue participating should be able to continue receiving net metering credits; however, the aggregator must be notified so that the Schedule Z filed with the local utility company can be adjusted. Project organizers should review prospective bidders' template participant agreements for flexibility on this issue.

The Public Lease Model

Implementing a CSS Project Under the Public Lease Model

A municipality can take the following steps to implement a CSS project under the Public Lease model:

- Form a project team. It is recommended that the team include a combination of municipal officials and staff - such as the Town Administrator, municipal energy efficiency coordinator, energy committee members, facilities managers, Town Counsel, or an owner's agent - and interested town volunteers;
- Start a local dialogue about CSS and generate project support by proactively addressing stakeholders' questions and concerns and marketing participation in the CSS project;
- Identify potential CSS project sites;
- Estimate the potential benefits to the municipality and the broader community of a CSS project at the identified site(s);
- Procure a lease agreement with a CSS vendor or solar developer through a competitive solicitation process;¹⁶ and
- Monitor the progress of the CSS vendor.

Forming a Project Team

To build a project team, project organizers should consider the human capital in their community.

Who Should be Involved?

The most successful CSS projects will include the following:

- **Project Champion.** Renewable energy projects—especially cutting-edge projects like CSS—can be time-intensive. The project champion manages the time requirements of the project, organizes and motivates a strong team of supporters, and ensures that the project progresses even when other project team members may be unavailable.
- **Key Municipal Departments and Staff.** With their wealth of knowledge of municipal facilities, finances, and politics, local officials and staff are valuable project team members. Buy-in from local officials is required; once their support is obtained, other departments may be more likely to cooperate. Facilities managers have detailed knowledge of potential project sites. Finance committee members can critically review vendors' bids.

¹⁶ Development of solicitation documents and lease agreements should be done in consultation with an attorney.

The Public Lease Model

The purchasing department can help prepare the solicitation documents and manage the process. Town counsel or city solicitors are essential to tailoring contract documents to the municipality. While local officials and staff may have limited time, their expertise and ownership of a project make for a very strong negotiating team.

- **Owner's Representative.** CSS is a relatively new concept, and these projects involve long-term contracts. An owner's representative is often helpful and/or necessary to provide the administrative capacity and technical expertise needed to make informed business decisions. Consultants or attorneys with expertise in solar PV or CSS can help project organizers maximize economic benefit and minimize risk to the municipality and participants.
- **Community Leaders and Volunteers.** Getting local community groups, activists, and volunteers involved can increase the profile of the municipality's efforts and reduce the burden on municipal staff. Consider educators and students at local academic institutions. Invite small business owners, financiers, and engineers—especially those with an interest or experience in clean energy—to lend their expertise. Tap into existing local volunteer energy committees to find people with demonstrated interest in local sustainability initiatives.

Begin Discussions with the Local Electric Utility Company Contact

Meeting with representatives of the local electric utility company in the early stages of project planning can be informative for CSS project teams. These discussions with account managers or distributed generation experts can help shape a CSS project and identify any fatal flaws, such as a lack of available net metering capacity.

Starting a Local Dialogue

Starting a local dialogue about CSS and garnering community members' support for a specific project during its early planning stages will help ensure a transparent and successful project.

What Motivates Stakeholders to Support a CSS Project?

To build project support, it is important to understand the motivations and concerns of the possible stakeholders, such as the town administrator, board of selectmen, facilities managers, educators, local business owners, and private citizens.

Stakeholders are typically motivated by at least one of the following:

The Public Lease Model

- **Economic Benefits.** In the Public Lease model, the municipality benefits from lease payments and, tax revenue. Participants benefit from net metering credits applied against their electric bills. As previously noted, however, economic benefits to the municipality and participants are interrelated. The net economic benefits of a CSS project are divided between the site owner and participants; a higher lease payment to the site owner hosting a CSS project, for example, may result in decreased value to participating residents and businesses. Project organizers are encouraged to carefully consider this relationship when establishing a goal for lease revenue.
- **Non-Economic Benefits.** Some stakeholders' primary interest in solar PV projects is the environmental benefits, as well as interest in contributing to statewide greenhouse gas reduction targets and state and municipal renewable energy targets. A variety of resources for different audiences addressing these benefits are available online.¹⁷ Local officials, school administrators, educators, and parents may be motivated by the potential educational value of school-sited CSS projects.
- **Other Communities Have Proven that this Works.** Across the country, public and private entities are hosting and facilitating CSS projects. Stakeholders, such as prospective participants, may wish to contact parties involved with completed or ongoing CSS projects to discuss their experiences. Visits to nearby solar PV installations or CSS projects may be useful.¹⁸
- **Demonstrating Leadership.** While certain stakeholders need to see successful example projects, others will be motivated by the opportunity to be one of the first to facilitate a CSS project. Project organizers of completed CSS projects can become local and regional clean energy leaders.

¹⁷ See, for example, the U.S. Department of Energy, U.S. Environmental Protection Agency, the National Renewable Energy Laboratory, and DOER websites.

¹⁸ For a summary table of existing CSS projects, see "Community Shared Solar: Review and Recommendations for Massachusetts Models" (2013).

The Public Lease Model

Marketing a Community Shared Solar Project

Marketing is critical to the success of a CSS project. Through marketing, area residents and businesses are encouraged to participate in a CSS project; greater participation can translate to a larger, more cost-effective project, increasing the economic benefit to the municipality and participants.

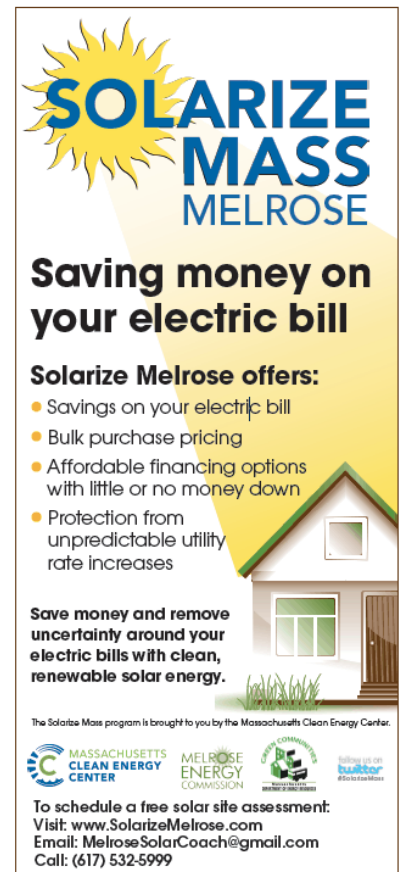
Successful marketing campaigns may be time and labor intensive and can require more administrative and technical support than a municipality is able to provide. Established CSS vendors, however, are likely to have the experience and expertise necessary to design, launch, and manage a successful marketing campaign. Nevertheless, supplemental marketing and outreach efforts by the project team can potentially help reduce the vendor's participant-acquisition costs and attract more participants, thereby increasing the economic benefit to all parties. This type of community-led supplemental engagement also provides the project participants with the endorsement of a local voice.

In designing a community-led marketing plan, project organizers should begin by assessing the resources available to help market CSS efforts. For example, local government may be willing to provide notice of a potential project in community mailers, create a CSS-dedicated mailer, or host an educational event for stakeholders. Further, elected and non-elected community leaders may be willing to publicly support CSS efforts through updates at Board of Selectmen meetings, for example. Leveraging such partnerships and relationships can provide no or low cost alternatives to paid advertising and encourage word-of-mouth information dissemination.

Additionally, a project team's research in the early stages of a CSS project may provide insights on target markets and how best to reach them. For example, if many small businesses are found to have an interest in CSS, the Chamber of Commerce and similar organizations should be included in marketing and outreach efforts.

Table 2 outlines marketing and outreach efforts that project teams can consider for development of a community-led marketing plan.

¹⁹ This Solarize Massachusetts banner from the City of Melrose is a good example of the type of marketing material that could be used to market a CSS project. Solarize Massachusetts (Solarize Mass) is a program that encourages the adoption of small-scale solar PV by deploying a coordinated education, marketing and outreach effort, combined with a tiered pricing structure that provides increased savings as more people in the community go solar. For more information about the SolarizeMass program, please visit the Massachusetts Clean Energy Center's SolarizeMass Website at <http://www.solarizemass.com/index.cfm/page/About-Solarize/pid/12858>

A vertical banner for Solarize Mass Melrose. At the top is a yellow sun icon with the text "SOLARIZE MASS MELROSE" in blue. Below this is the headline "Saving money on your electric bill" in bold black text. Underneath is a list of benefits under the heading "Solarize Melrose offers:":

- Savings on your electric bill
- Bulk purchase pricing
- Affordable financing options with little or no money down
- Protection from unpredictable utility rate increases

To the right of the list is a small illustration of a house with solar panels on the roof. Below the list is the text "Save money and remove uncertainty around your electric bills with clean, renewable solar energy." At the bottom, it says "The Solarize Mass program is brought to you by the Massachusetts Clean Energy Center." and includes logos for the Massachusetts Clean Energy Center, Melrose Energy Commission, and a "Join us on Facebook" button. Contact information is provided: "To schedule a free solar site assessment: Visit: www.SolarizeMelrose.com Email: MelroseSolarCoach@gmail.com Call: (617) 532-5999".

*City of Melrose Solarize Massachusetts¹⁹
Marketing Banner
Source: City of Melrose and Lori Timmermann*

The Public Lease Model

Table 2: Potential Elements of a Community-Led Marketing Plan

Marketing and Outreach Efforts	Details
Direct Mail	Advertise the project in community mailers or other direct mail opportunities (e.g., town water bills). Advertisements and fliers in community mailers or newsletters can serve the dual purpose of marketing CSS efforts and assessing local interest. Collecting potential participants' name and contact information during this process can help increase prospective bidders' interest and facilitate the aggregator's efforts.
E-Mail Blasts	Distribute e-mails and/or content to local officials and staff, public schools, and private residents and businesses to raise project awareness and support ongoing communication.
Press Releases	Distribute press releases to local newspapers and other media outlets to raise project awareness and distribute important project updates.
Electronic Survey of Potential Participants	Use free online survey tools to assess community interest in CSS. Solicit ideas (e.g., project names), feedback, and requests from residents and businesses.
Informational Forums or Workshops	Host informational forums or workshops to proactively address stakeholders' questions. Invite those with solar PV or CSS expertise (e.g., volunteer energy committee members, CSS project developers) to lead the discussion. Consider non-traditional venues, such as farmers' markets.
Awareness Collateral	Develop lawn signs, banners, door hangers, bumper stickers, t-shirts, and other materials to increase awareness in the community. If possible, post marketing materials at municipal buildings and venues where target markets are most likely to be reached and information shared.
Online Engagement	Invite communities or individuals with CSS or solar PV experience to share their stories, photos, and experiences using a dedicated Website, blog, or social media.
Paid advertising	Develop marketing content for traditional media outlets, such as radio and television. This strategy can be costly; project organizers should consider low-cost alternatives, such as cable access television.
Educational and Curriculum Materials	To support long-term project awareness, incorporate CSS and solar PV educational materials into the curriculum at local schools. Established CSS vendors may be able to provide curriculum that fits within the Massachusetts Curriculum Framework.
Case Studies	Develop case studies of existing CSS projects, including testimony from site owners and participants, for use in marketing materials.
Partnership Marketing	Increase publicity and reach additional potential participants through strategic partnerships with large public and private institutions, such as universities and hospitals, and municipalities within the same electric utility company's service territory and ISO-New England load zone.
Coordination with Local Solarize Programs	A public CSS project may be able to build on the education efforts of a local SolarizeMass program. Residents who want to participate in the Solarize program, but are unable to do so due to roof issues, might be interested in participating in a CSS project.

The Public Lease Model

Ultimately, the project specifics, including the marketing plan, will largely be a function of the winning CSS vendor's proposal that was procured to lease the CSS project site. To support a fair and equal comparison of proposals, all bidders should be required to provide their proposed marketing strategy, marketing qualifications, and any limitations on community-led marketing. Also, the project team's marketing requirements should be included in solicitation documents. For example, if project organizers intend to lead branding efforts (e.g., name the project and develop campaign identification), this should be clearly stated.

Identifying Potential CSS Project Sites

To maximize a project's economic benefits, project organizers will want to identify potential project sites that are well-suited for solar PV installations.

What Makes a Good Site?

In selecting a site, project organizers should consider the following:

- Ideally, CSS project development represents the best use of a potential project site. Project organizers should carefully consider the trade-offs among different uses of a specific site. A CSS project sited on a closed public landfill, for example, would generate more revenue for the municipality than no development on the landfill; however, entering into a solar EMS agreement and lease for a PV system installed at the landfill rather than implementing a CSS project would likely create more value for the municipality because the municipality does not share the benefits of a solar EMS agreement with other parties. In contrast, the benefits of a CSS project are divided among the site owner and participants.
- Project sites should have very little or no shading. Even small amounts of shading may have a significant impact on the output of a solar PV system. The most ideal rooftops for solar PV have few penetrations and obstructions (e.g., vents, rooftop units), as these create shading.²⁰
- For rooftop PV installations, sites with new roofs (e.g., less than five years old) are ideal. The useful life of solar PV systems can exceed 25 years.²¹ If a PV system is installed on

²⁰ Project sites must also have sufficient load-bearing capacity to accommodate the weight of the PV installation. (A solar PV system typically adds an additional two to seven pounds per square foot to building static loads and can increase wind-loading on the roof deck.) Through the RFP and lease agreement, the municipality can require that the CSS vendor ensure that the site is appropriate for solar.

²¹ National Renewable Energy Laboratory. "Distributed Generation Renewable Energy Estimate of Costs and Useful Life." June 2011: pg. 5. Available at: <http://www.nrel.gov/analysis/pdfs/dglcoedata.pdf>

The Public Lease Model

a roof that needs to be replaced during the lifetime of the CSS project, the combined cost of PV system removal, roof replacement, and PV system reinstallation can be very expensive.

- In addition to roof space, consider underutilized open spaces, like closed and capped landfills, brownfields, undeveloped commercial property, gravel pits, and transfer stations. Sites that require significant tree clearing, site cleanup, or remediation, however, will increase project development costs and reduce participants' economic benefit. DOER strongly discourages siting solar in locations that require significant tree cutting, because of the important water management, cooling and climate benefits that trees provide.
- Prospective project sites should be free of zoning conflicts. Early in the planning stage, project organizers should consult with the local planning board to identify any potential zoning issues (e.g., solar PV projects in historic districts may be subject to restrictions) and to pursue any required zoning changes. Solar overlay districts and as-of-right siting can help pave the way for the development of CSS projects. For model zoning bylaw language, project organizers should reference the DOER's Model As-Of-Right Zoning Bylaw, which allows the use of large-scale ground-mounted solar PV installations, and zoning guidance for small and medium scale ground-mounted and roof-mounted solar.²²
- Consider potential limitations of the electric utility company distribution system at potential project sites. In certain sections of the distribution system called area networks, for example, solar PV systems often cannot be interconnected to the electricity grid due to concerns about reliability. Area networks are typically located in high density areas. For example, portions of the cities of Boston and Cambridge are within the local utility's area network. The interconnection capacity at a potential project site, or the ability of existing electrical infrastructure to accommodate a solar PV system, can also limit project location and capacity.
- Consider local green schools or other high-performance buildings. Such buildings may have been designed to be solar-ready. Solar-ready buildings have limited penetrations and obstructions, are structurally suitable, and have appropriate electrical infrastructure.

²² Department of Energy Resources. Model As-Of-Right Zoning Bylaw: Allowing Use of Large-Scale Ground-Mounted Solar Photovoltaic Installations. March 2012. Available at <http://www.mass.gov/eea/docs/doer/green-communities/grant-program/solar-model-bylaw-mar-2012.pdf>. A model zoning bylaw with accompanying guidance for small- and medium-scale ground-mounted and roof-mounted solar will be available from DOER in Spring 2013.

The Public Lease Model

Project size is a function of useable space at a project site, how many participants enroll, and the project size requirements of the CSS vendor. A relatively large PV system may be required to attract the attention of prospective bidders.²³ Larger system sizes allow the aggregator to take advantage of economies of scale and offer net metering credits at a rate that will create net positive benefit for participants. Project organizers should consult with prospective bidders about ideal system size and average membership size (e.g., kW per participant).

Estimating Costs and Benefits

In this section, we estimate the costs and benefits of a hypothetical CSS project at a public school following the Public Lease model.

The steps in calculating the benefits of the Public Lease model are:

- Estimate the solar PV system capacity (kW) that can be accommodated at the proposed site and the expected energy generation (kWh);
- Calculate the applicable net metering credit rate and value;
- Calculate the community net benefit (that is, the total economic benefit to the site owner and participants); and
- Distribute the community net benefit between the site owner and participants.

Kilowatts and Kilowatt-Hours

Kilowatt (kW) is a measure of power and a kilowatt-hour (kWh) is a measure of energy. These terms are used frequently throughout this guide. The generating capacity of a system, or the amount of power being consumed at one point in time, is measured in kW. The amount of energy consumed or generated over a period of time (e.g. one hour) is measured in kWh.

For example, if a home uses an average of 5 kW of power over a 2-hour period 10 kWh of energy have been consumed (kWh is kW multiplied by hours).

²³ As a general guideline, a prospective project site should be able to accommodate a 100 kW or larger PV system. A 100 kW PV systems requires approximately 25,000 square feet of solar-ready space.

The Public Lease Model

Step 1: Expected Energy Generation

Solicitation documents should require prospective bidders to provide preliminary estimates of PV system capacity and annual energy generation. These estimates will be refined by the selected bidder after detailed engineering studies, such as a structural feasibility analysis, are completed. Before bids are received, however, project organizers can use simple tools and guidelines to estimate system capacity and annual energy generation.

Estimate Solar PV System Capacity (kW)²⁴

Solar PV system capacity can be estimated by multiplying the site area by an assumption about the capacity that can be accommodated in a given area. For preliminary cost and benefit analyses, it is reasonable to assume 3.5 kW per 1,000 square feet.²⁵

Step 1: Calculating PV System Capacity

PV System Capacity (kW) = Project Site Area (square feet) × (3.5 kW)/(1,000 square feet)

Example

Project organizers identify a public school building as a potential project site. The school's roof is less than five years old, no repairs are needed, and shading is minimal. Using the school's footprint in square feet, or free Web-based applications (for example, using the "Ruler" tool in Google Earth to estimate the area of each section of flat roof), project organizers estimate that the total useable roof area at the school is 30,000 square feet. They also assume 3.5 kW per 1,000 square feet, as some equipment and vents create shading on the roof.

Total Estimated Roof Area = 30,000 square feet

PV System Capacity (kW) = 30,000 sq.ft. × 3.5 kW/(1,000 sq.ft.) = 105 kW

²⁴ Solar capacity as used in this guide refers to "DC" or "direct current capacity." This refers to the power coming directly from the PV modules, before it is converted to "AC" or "alternating current" power by an inverter for use at a building.

²⁵ Typical flat roof commercial installations require 1,000 square feet of useable roof space to accommodate two to five kW of solar PV. If the roof has multiple levels and many obstructions (e.g., HVAC equipment) that create shading, this value may be closer to 2 kW. If obstructions are limited and the architecture is relatively simple, this value may be closer to 5 kW. When estimating useable space for rooftop solar PV projects, project organizers should disregard any roof sections that require repair or renovation.

The Public Lease Model

Estimate Annual Energy Generation (kWh)²⁶

Annual energy generation (kWh) can be calculated using estimated PV system capacity (kW). In Massachusetts, a typical solar PV system produces 1,200 kWh of energy per year for every kW of capacity. Free Websites and software tools are available to help estimate energy generation. PVWatts, for example, is a free online tool developed by the National Renewable Energy Laboratory (NREL).

Standard Inputs for Solar PV Generation Tools – Commercial Flat Roof Scenario

Project organizers aim to use PVWatts to estimate the annual energy generation of the PV system. PVWatts requires users to provide various inputs. For commercial PV projects on flat roofs, the following inputs can be used:

Array Type =Fixed Tilt
Array Tilt=20 Degrees*
Array Azimuth=180 Degrees**

*For sloped roofs, the PV system array tilt will equal the slope of the roof.

**The azimuth is equal to the orientation of the roof with due south equal to 180 degrees. A directly southwest facing roof has an azimuth of 225 degrees, while a directly southeast facing roof has an azimuth of 135 degrees.

Example

To estimate annual energy generation for the 105 kW PV system on the school roof, project organizers enter standard inputs listed above into PVWatts Version 1.0, as well as the project-specific information:

City: Boston*
DC Rating (kW): 105**
Array Tilt (Degrees): 20
Array Azimuth (Degrees): 180

PVWatts Estimated Annual Energy Generation= 126,821 kWh

*For Massachusetts projects, PVWatts Version 1.0 users can select either Boston or Worcester.

**In PVWatts, PV system capacity is called "DC Rating."

²⁶ PVWatts Version 1.0 is the simplest version of this tool to use; however, Version 2.0 offers additional features to users. Version 1.0 and Version 2.0 of PVWatts are available at www.nrel.gov/rredc/pvwatts/.

The Public Lease Model

Step 2: Net Metering Credits

Participants under the Public Lease model benefit from net metering credits applied against their electric bills. The annual value of these credits is the product of the value of individual net metering credits (the net metering credit rate) and the estimated annual energy generation.

Net Metering Credit Rate

Net metering credit rates vary across the Massachusetts utilities. The net metering credit rate for a particular project is determined by the electric rate customer class assigned by the electric company to the host customer. For CSS projects that require virtual net metering, the Small Commercial (e.g., G-1) rate class will likely be assigned. Typically, this rate class generates the greatest economic value for net metering credit recipients.

Net metering credit rates can vary throughout the year. It is possible, for example, for rates to change two cents per kWh or more during a calendar year. In a preliminary economic analysis, seasonal rates can be averaged to account for these variations.

Correctly calculating net metering credits rates can be a complex, time-intensive process. Project organizers should contact the municipality's utility account representative to confirm the current net metering credit rate using the Small Commercial rate class. To calculate the credit manually, locate the applicable electric utility company's current tariff,²⁷ and total the utility charges seen in Table 3 for the Small Commercial rate class.^{28,29}

²⁷ Electric utility company tariffs are available through the Department of Public Utilities Website. Please see <http://www.mass.gov/eea/energy-utilities-clean-tech/electric-power/electric-tariffs/electric-company-tariffs.html>.

²⁸ The calculated net metering credit rate applies to private projects up to 1 MW(AC) in size.

²⁹ For more information on calculating net metering credit rates, please see the DOER's please see the DOER's Distributed Generation and Interconnection in Massachusetts website (Available at <https://sites.google.com/site/massdgc/home/net-metering>).

The Public Lease Model

Table 3: Calculating Net Metering Credit Rates

For a CSS Project, Add the Utility Charges Below for the Small Commercial Rate Class	
Distribution Charge	[obtain local rate]
Transition Charge	[obtain local rate]
Transmission Charge	[obtain local rate]
Basic Service	[obtain local rate]
Total Net Metering Credit Rate	\$ per kWh

Annual Value of Net Metering Credits

The example below outlines how project organizers can estimate the annual value of net metering credits.

Step 2: Calculating Annual Value of Net Metering Credits

Annual Value of Net Metering Credits (\$) = Net Metering Credit Rate (\$/kWh) × Annual Energy Generation (kWh)

Example

Following the procedure in Table 1 above, project organizers calculate a net metering credit rate of \$0.16 per kWh and confirm this rate with their utility account representative. This information is used to approximate the annual value of net metering credits from a CSS project at the school.

Estimated Annual Energy Generation = 126,821 kWh

Net Metering Credit Rate (\$ per kWh) = (\$0.16)/kWh

Annual Value of Net Metering Credits (\$) = 126,821 kWh × (\$0.16)/kWh = \$20,291

The Public Lease Model

Step 3: Community Net Benefits

The economic benefits of the CSS project at the school are divided within the community; that is, between the municipality and participants. In this step, we assume that there are no lease payments to the municipality. Lease payments are considered in Step 4.

The annual net economic benefit to the community as a whole, when there are no lease payments, is the difference between the annual value of net metering credits and the cost of the net metering credits. To estimate the annual net benefit per participant, we assume that each participant receives an equal share of the project's net metering credits.

Depending on the CSS vendor's business model, participants' payments for net metering credits may be structured as recurring payments or as a single up-front fee. In the first three examples below, we assume a recurring payment structure. The final example considers an alternative single up-front fee scenario.

The CSS vendor receives the net metering credit payments from the participants. This amount (\$12,682), therefore, is the CSS vendor's annual net revenue.

Step 3: Calculating Annual Community Net Benefit

Annual Community Net Benefit (\$) = Annual Net Metering Credit Value (\$) - Annual Cost of Net Metering Credits (\$)

Where:

Annual Cost of Net Metering Credits (\$) = Net Metering Credit Purchase Price (\$ per kWh) x Estimated Annual Energy Generation (kWh)

We assume that there are no lease payments.

Example

A typical solar EMS per kWh rate is used as a proxy for the net metering credit purchase price.

Annual Value of Net Metering Credits (\$) = \$20,291

Net Metering Credit Purchase Price (\$ per kWh) = \$0.10/kWh

Estimated Annual Energy Generation (kWh) = 126,821 kWh

Anticipated Number of Participants = 20

Estimated Annual Energy Generation (kWh) = Annual Cost of Net Metering Credits = \$0.10/kWh × 126,821 kWh = \$12,682

Annual Community Net Benefit (\$) = \$20,291 - \$12,682 = \$7,609

Annual Net Benefit per Participant (\$) = \$7,609 / (20 Participants) = \$380

The Public Lease Model

The Brewster Community Solar Garden® Cooperative, Inc., is an example of the Public Lease model. My Generation Energy (MGE), a full-service solar installation firm on Cape Cod, organized and built a CSS project in Brewster, Massachusetts. For more information on this project, see “Community Shared Solar: Review and Recommendations for Massachusetts Models.”



Source: My Generation Energy, Inc. photo used with permission

In Step 3, it was established that the CSS vendor receives an annual net revenue of \$12,682 in net metering credit payments from the participants. In the case where the vendor must make a lease payment to the site owner, we assume that the vendor still needs take in \$12,682 in net revenue to be made whole. Therefore, the cost of a lease payment to the site owner will be passed on to the participants in the form of a higher net metering credit cost. In our scenario, we assume a direct relationship between the amount of the lease payment and the increase in the participants' net metering credit cost.

Step 4: Net Benefit Distribution

Next, we consider a lease payment for the site owner. As previously discussed, the benefits to the different parties in a CSS project are interrelated. A higher lease payment to the municipality will likely result in a decreased net benefit to participants. For example, project organizers may decide that the municipality is entitled to half of the community net benefit in the form of a lease payment from the system owner. This cost may be passed on to participants by increasing the cost of net metering credits.

To calculate how community net benefits will be distributed, we first calculate the annual lease payment to the municipality (site owner). This can be achieved by assigning a percentage of the community net benefits to the site owner in the form of lease payment.

The Public Lease Model

Step 4a: Calculating Site Owner Annual Net Benefit (Lease Payments to the Municipality)

Annual Site Owner Net Benefit (\$) = Percentage of Community Net Benefit to Site Owner (%) × Annual Community Net Benefit (\$)

Example

Project organizers want to estimate the annual lease payment to the municipality if the municipality takes 50% of annual community net benefit.

Annual Community Net Benefit (\$) = \$7,609

Annual Site Owner Net Benefit (\$) = 50% × Annual Community Net Benefit (\$) = 50% × \$7,609 = \$3,805

With the lease payment established, the annual net benefit to participants must be adjusted.

Step 4b: Calculating Participants' Annual Net Benefit (Adjusted for Lease Payment to Site Owner)

Participants' Annual Net Benefit (\$) = Community Net Benefit (\$) - Annual Site Owner Net Benefit (\$)

Example

Project organizers want to calculate participants' net benefit in a scenario where the municipality takes 50% of the community net benefit in the form of lease payments. It is assumed that the CSS vendor will pass on the cost of the lease to participants.

Annual Community Net Benefit (\$) = \$7,609

Annual Site Owner Net Benefit (Lease Payment to the Municipality) (\$) = \$3,805

Anticipated Number of Participants = 20

Annual Participant Net Benefit (\$) = \$7,609 - \$3,805 = \$3,804

Annual Net Benefit per Participant (\$) = (\$3,804) / (20 Participants) = \$190

It is not possible to calculate the actual impact of lease payments to the site owner on the price paid by participants. The actual impact will depend on the selected vendor and the structure of the specific project. In this guide, we assume a direct relationship between these variables.

The Public Lease Model

Step 4c: Calculating Adjusted Net Metering Credit Purchase Price

Adjustment to Net Metering Purchase Price (\$ per kWh) = (Annual Lease Payment (\$)) / (Annual Estimated Energy Generation (kWh))

Adjusted Net Metering Credit Purchase Price (\$ per kWh) = Net Metering Credit Purchase Price (\$ per kWh) + Adjustment to Net Metering Credit Purchase Price (\$ per kWh)

Example

Project organizers want to know the impact on participants' net metering purchase price where the municipality takes 50% of the community net benefit (estimated to be \$3,805 annually from lease payments). The net metering credit purchase price (without lease payments) is assumed to be \$0.10 per kWh.

Annual Site Owner Net Benefit (Lease Payment to the Municipality) (\$) = \$3,805

Net Metering Credit Purchase Price (\$ per kWh) = \$0.10/kWh

Estimated Annual Energy Generation (kWh) = 126,821 kWh

Adjustment to Net Metering Credit Purchase Price (\$ per kWh) = (\$3,805) / (126,821 kWh) = \$0.03 per kWh

Adjusted Net Metering Rate (\$ per kWh) = \$0.10 per kWh + \$0.03 per kWh = \$0.13 per kWh

Single Lump Sum Payment Option

If participants' payments are structured as a single up-front fee, different metrics are used to assess participants' benefit. Rather than estimate the participants' annual net benefit for participants, the metric used is participants' simple payback.

The Public Lease Model

Step 4d: Calculating Participants' Simple Payback Period (With Lease Payment to Municipality)

Participant Simple Payback=(Upfront Payment per Participant (\$))/(Annual Value of Net Metering Credits per Participant (\$))

Annual Value of Net Metering Credits per Participant (\$) = (Annual Value of Net Metering Credits (\$))/(Estimated Number of Participants)

Example

Project organizers want to estimate the simple payback period for participants if the CSS project at the school requires a single up-front payment. Based on discussions with CSS vendors and recent CSS projects in Massachusetts, they believe that a single payment of \$6,000 per participant is realistic after consideration for the lease payment to the municipality.

Annual Value of Net Metering Credits (\$) = \$20,291

Estimated Number of Participants = 20

Annual Value of Net Metering Credits per Participant (\$) = (\$20,291)/20 = \$1,015

Participant Simple Payback=(\$6,000)/(\$1,015) =5.9 years

The Procurement Process

State procurement regulations require a competitive solicitation process for the lease of the public building or land on which a CSS project is constructed. This process can be conducted as a disposition of real property, pursuant to Massachusetts General Law Chapter 30B §16.^{30,31} For the lease of a public building, the lease agreement should contain provisions to address any damage to the building that might occur during installation and operation of the CSS project.

³⁰ For more information on procurement under M.G.L. c. 30B, please contact the Attorney of the Day at the Inspector General's office at 617-722-8838. Additionally, "The Chapter 30B Manual: Legal Requirements, Recommended Practices, and Source of Advice for Procuring Supplies, Services, and Real Property" available online at: <http://www.mass.gov/ig/publications/manuals/30bmanl.pdf>. Solicitation documents and lease agreements should be prepared in consultation with an attorney.

³¹ Contact the Department of Labor Standards (DLS) to determine prevailing wage implications for any installation on municipal property: <http://www.mass.gov/lwd/labor-standards/prevaling-wage-program/>.

The Public Lease Model

Issuing a Request for Proposals

Project organizers should consult with procurement officials to follow recommended best practices for disposing of real property for public purposes under M.G.L. c. 30B. An ideal RFP will allow prospective bidders to propose their own distinct approach and proactively facilitate a fair and equal comparison of proposal. Section 6 contains an example of a RFP under the Public Lease model.

We recommend several strategies to facilitate a fair and equal comparison of vendors' proposals in Table 4.

Selecting a Vendor

To select a qualified vendor that is suitable for the project, proposal reviewers should consult with their local procurement officials. Responsive proposals will meet all RFP requirements. In addition to proposed lease revenue, reviewers should consider, for example, respondents' experience with solar PV and CSS, Massachusetts experience, estimated PV system size, and marketing plan.

Other Factors to Consider

Project organizers should consider potential challenges to CSS project development, such as zoning, permitting, and property taxes.³²

Zoning

A zoning exemption under M.G.L. c. 40A §3 provides solar energy systems with special status, noting: "No zoning ordinance or by-law shall prohibit or unreasonably regulate the installation of solar energy systems or the building of structures that facilitate the collection of solar energy, except where necessary to protect the public health, safety or welfare."

Some municipalities do not have zoning bylaws in place; while others have created bylaws/ordinances in an effort to provide reasonable regulations that protect public health and safety. It is important to be aware of a municipality's zoning bylaws related to solar before proceeding with a CSS project.

³² For detailed information on challenges and barriers to CSS project development in Massachusetts, please see "Community Shared Solar: Review and Recommendations for Massachusetts Models" (2013).

The Public Lease Model

Table 4: Strategies for Facilitating a Fair and Equal Comparison of Vendors' Proposals

Recommendation	Discussion
Detailed description of the municipality's goals and expectations	Project organizers should be clear about the goals of the project, so as to avoid confusion with typical solar EMS projects, for example. Organizers should also note the anticipated number of participants, if available. If the municipality requires that bidders have specific experience (e.g., public CSS project experience, Massachusetts PV experience, ground-mounted solar PV experience), such expectations should be clearly delineated.
Detailed description of the proposed project site	These include the findings of any feasibility studies. With this information, the risk to prospective bidders of pursuing an unviable project decreases. This information also helps prospective bidders to calculate and propose lease payments.
Requirement for site assessment	Prospective system owners should be required to conduct their own assessment of the proposed project site and provide system capacity and output projections, as well as anticipated benefits to the municipality and participants.
Standard pricing assumptions	By requiring that all bidders use the same assumptions when building their price proposal, project organizers can better identify the best deal for their community and reduce variability across proposals. Standard assumptions should be provided for annual price increase for electricity from the grid (e.g., 2%), annual solar PV panel degradation (e.g., 0.5%), inflation (e.g., 3%), interest rate, required decommissioning assurance (e.g., escrowed funds to pay for PV system operations and maintenance), property taxes, and insurance. Bidders should be required to use the standard pricing assumptions and baseline system capacity (see below) to calculate financial projections.
Baseline system capacity	Bidders should be required to propose a lease payment for two scenarios: (1) using a baseline system capacity provided in the RFP; and (2) using a system capacity of their choosing (e.g., determined through a site assessment). This will allow the project team to conduct a fair and equal comparison of proposals.
Requirement to submit template participant and lease agreements	Project organizers should require prospective bidders to submit a template of the participant and lease agreements with their proposal so that project teams can educate potential participants about the CSS project and assess the potential costs and benefits to the municipality. The lease agreement should include protections for the public building or site where the PV system is to be installed.
Requirements for system owners to confirm compliance with securities law and their ability to capture the ITC	Municipalities and participants should have confidence that prospective bidders' business models comply with securities regulations. Require prospective bidders to submit with their proposal a legal opinion from independent counsel confirming that their business model complies with Massachusetts and federal securities laws. Also, require bidders to submit a legal opinion that their approach for capturing the ITC is in compliance with applicable laws.
Template response form	Each bidder will prepare a unique response following their preferred format. To ensure that each bidder's proposal includes the same fundamental information, the RFP should include a template response form listing project organizers' key questions; for example, on the bidders' business model, qualifications, marketing plan, template participant agreement, teaming arrangement, project finance plan, balance sheet and profit and loss statement if possible, and preferred contract documents.
Proposal checklist	The RFP should include a checklist, to be completed by each bidder, that lists key project requirements, mandatory contract terms, and technical and price proposal requirements. Each bidder should be required to complete the form, acknowledging these requirements and certifying that these requirements have been factored into their response.
Mandatory pre-bid conference	Pre-bid conferences give project organizers an opportunity to detail their goals and expectations. Prospective bidders can ask questions to refine their understanding of the project and proposal requirements.

The Public Lease Model

DOER recommends that municipalities create reasonable municipal zoning bylaws and ordinances to address solar energy facilities. For model language, project organizers should reference the DOER's Model As-Of-Right Zoning Bylaw, which allows the use of large-scale ground-mounted solar PV installations, and model zoning bylaw and associated guidance for small- and medium-scale ground-mounted and roof-mounted solar.³³

Local Permits

Local permit requirements and costs will vary across jurisdictions. Requirements for building and electrical permits vary by municipality. Municipal officials should consult with the local building department in the project planning phase. As a best practice, project organizers are encouraged to include anticipated permitting costs in the RFP documents.

The Brewster Community Solar Garden Cooperative, Inc., a member-owned cooperative, serves as the aggregator of this 346 kW system in an industrial park on land owned by the Town of Brewster, Massachusetts. Participants buy into the cooperative and purchase the equivalent of 28 PV panels. Net metering credits generated by the systems are applied to participants' electric bills. My Generation Energy, Inc. assumes ownership of the SRECs. For more information on this project, see "Community Shared Solar: Review and Recommendations for Massachusetts Models" (2013).



Source: My Generation Energy, Inc. photo used with permission.

³³ Department of Energy Resources. Model As-Of-Right Zoning Bylaw: Allowing Use of Large-Scale Ground-Mounted Solar Photovoltaic Installations. March 2012. Available at <http://www.mass.gov/eea/docs/doer/green-communities/grant-program/solar-model-bylaw-mar-2012.pdf>. A model zoning bylaw with accompanying guidance for small- and medium-scale ground-mounted and roof-mounted solar will be available from DOER in Spring 2013.

The Public Lease Model

Property Taxes

Uncertainties related to property taxes can significantly impact project economics for all parties involved in solar PV projects. Although M.G.L. c. 59, §5 (45) provides a property tax exemption for solar and wind energy systems, this exemption applies only to projects that are “being utilized as a primary or auxiliary power system for the purpose of heating or otherwise supplying the energy needs of property taxable” under chapter 59.³⁴ The Department of Revenue’s Division of Local Services has interpreted this provision as requiring the use of the energy to be used at the site of the taxable property. Therefore, a CSS project would not be tax exempt. A Payment in Lieu of Tax (PILOT) agreement may be negotiated as an alternative to property taxes.^{35,36} Ultimately, the local assessing authority makes the determination of the method and amount of taxation of these types of systems.

Although comprehensive guidance recommending a specific assessment methodology is currently unavailable, DOR has provided workshops throughout the Commonwealth to provide local assessors with the tools and methodology for valuing solar PV systems for the purpose of local taxation or for negotiation of payment in lieu of taxes (PILOT) agreements. Before proceeding with a CSS project, the tax implications for the system and the impact on the project economics must be determined.

³⁴ M.G.L. c. 59 § 5, cl.45 reads, “Any solar or wind powered system or device which is being utilized as a primary or auxiliary power system for the purpose of heating or otherwise supplying the energy needs of property taxable under this chapter; provided, however, that the exemption under this clause shall be allowed only for a period of twenty years from the date of the installation of such system or device.”

³⁵ See M.G.L. c.164, §1, Definitions.

³⁶ For information about property taxes and PILOT agreements, please contact the Massachusetts Department of Revenue at 617-626-2400. Also see The Guide to Developing Solar Photovoltaics at Massachusetts Landfills (available at <http://www.mass.gov/eea/docs/doer/green-communities/pubs-reports/pvlandfillguide.pdf>).

The Public Lease Model

Section 4: The Participant Ownership Model

In this section, we review the Participant Ownership model, the roles and responsibilities of the parties, and steps to implementing CSS projects under this model. We also provide strategies for building a project team to ensure the success of a CSS project, procuring a contractor to install the PV system, and navigating the business incorporation process.

What is the Participant Ownership Model for Community Shared Solar?

The Participant Ownership model is suitable for community members interested in developing a CSS project that is independent of a CSS vendor or facilitation by local government. Project organizers are community members, such as residents. In addition to directly helping promote CSS, participants may benefit from a return on their investment in the company.

The key features of the Participant Ownership model are that private individuals drive the process and participants take an ownership stake in the project.



Source: Clean Energy Collective, photo used with permission

The Participant Ownership Model

When is the Participant Ownership Model Appropriate?

These projects will likely require a significant investment of time and may require thousands of dollars in attorney fees. The following attributes of this model should be considered when assessing the suitability of this model for a given project:

- Does not require the participation of the a public entity, such as a municipality, or the availability of public space;
- Does not require the availability of net metering services or virtual net metering, although this model can work well with virtual net metering;
- Is subject to securities limitations regarding the number of investors and the marketing of the project;
- Tends to be more practical in more affluent communities with a relatively high number of accredited investors;³⁷
- Provides a vehicle for local solar proponents who wish to participate in a solar PV or CSS project to take a more direct role than may be offered by the Public Lease model; and
- May not be suitable for larger projects (e.g. greater than 200 kW) due to SEC limitations on the number of participants and on marketing to prospective participants.

Benefits to the site owner may include lease revenue (Virtual Net Metering approach), energy cost reduction (Alternative to Virtual Net Metering approach), protection from electricity price volatility, and the public relations benefit of helping meet local demand for CSS by hosting the PV system.

Benefits to participating residents and businesses may include a return on investment (greater under Virtual Net Metering approach), and revenue from the sale of electricity to the site owner (Alternative to Virtual Net Metering approach).

³⁷ Investors are accredited if they meet specific conditions. The most relevant conditions are that the investor earns more than \$200,000 per year (\$300,000 if filing jointly) or has a net worth individually or with a spouse of at least \$1 million (excluding their primary residence).

The Participant Ownership Model

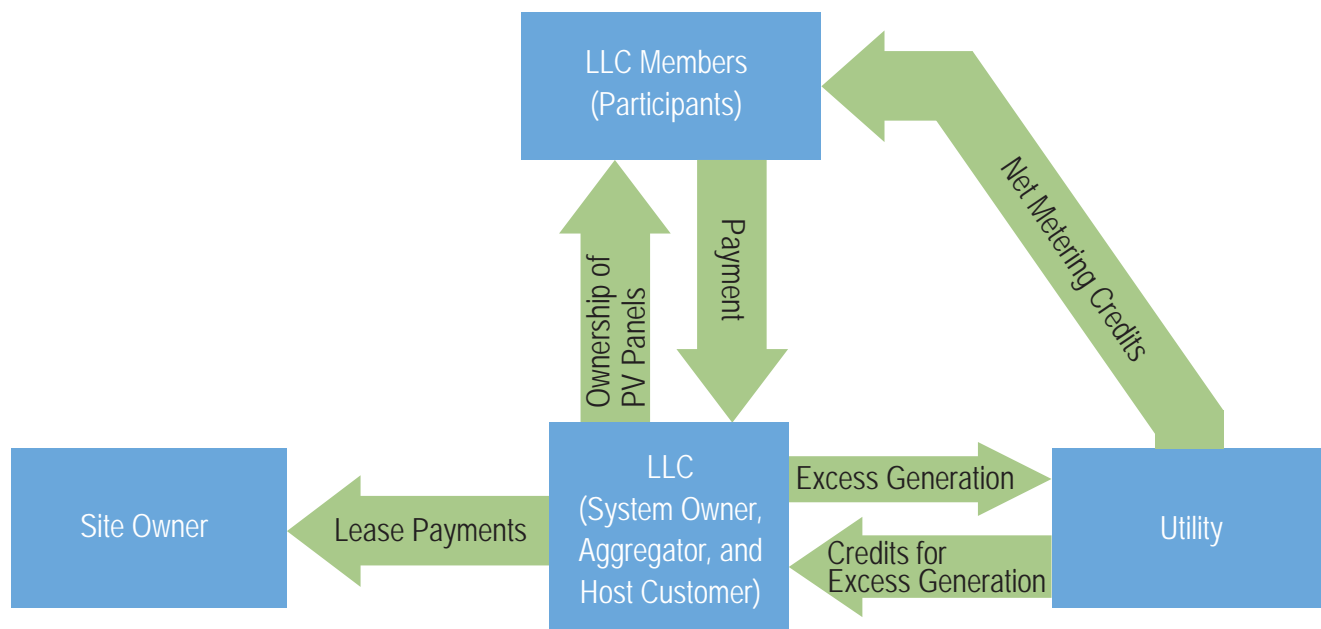
What Are the Roles and Relationships of the Parties under this Model?

The system owner is an entity, typically an LLC, formed by project organizers. Participants invest in the LLC and own a portion of the CSS project. Typically, two or three of the organizers are the active members of the LLC, act as the project aggregator, and are responsible for LLC management and project operations. The other members of the LLC are passive investors (that is, investors with no active role). The LLC enters into a lease agreement and/or solar PPA with the site owner and a PV installation and maintenance agreement with qualified contractors.

While there are many possible variations of the Participant Ownership model, we detail the following two approaches in this guide.

- **Virtual Net Metering.** When virtual net metering is available and used, the aggregator assigns net metering credits to participants, who benefit from their value. Participants (members of the LLC) also receive any revenue from the system owner or aggregator's sale of SRECs. The site owner receives a lease payment through a lease agreement with the LLC (i.e., the system owner, aggregator, and host customer) (Figure 3);

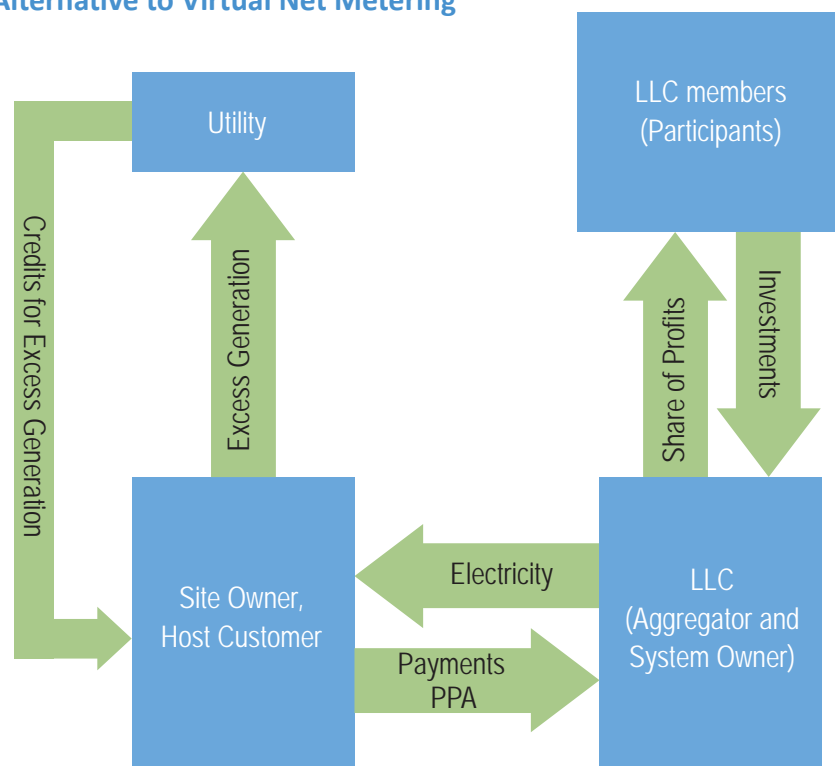
Figure 3: Virtual Net Metering



The Participant Ownership Model

- **Alternative to Virtual Net Metering Approach.** If virtual net metering is unavailable (for example, in a municipal utility territory), the LLC, which is both the system owner and aggregator, enters into a combined lease and PPA with the site owner, selling electricity produced by the PV system to the site owner on a dollar-per-kilowatt-hour basis. The electricity is fed directly into the electrical system at the site owner's property and this power replaces power that would otherwise have to be pulled from the grid. Such a project may incorporate traditional net metering, rather than virtual net metering. The site owner is the host customer, and any excess electricity generation (i.e., when the PV system is producing more power than the property is consuming) is credited back to the site owner's own electric utility account. This requires that there is sufficient load on site to use the electricity generated by the PV system. Participants (LLC members) benefit as investors from the LLC's sale of electricity to the site owner and revenue from the sale of SRECs (Figure 4).

Figure 4: Alternative to Virtual Net Metering



The Participant Ownership Model

Key Criteria and Considerations of the Participant Ownership Model

To maximize the benefits, community members interested in the Participant Ownership model should consider the following information.

- **Business Incorporation and Securities Requirements.** Project organizers will need to establish a business and navigate the registration exemptions of the Massachusetts Securities Division and SEC, as CSS models that involve an ownership stake by participants can trigger complex registration requirements that could be prohibitively expensive and time-consuming for project organizers. The exemptions to the requirements also involve time, expense, and limitations; however, the scale of these challenges is likely more manageable for project organizers.

The most common and representative exemption is Regulation D of the private offering exemption. While different rules within Regulation D provide for different requirements, the exemption typically allows raising up to \$1 million in any 12-month period. Regulation D imposes a number of limitations, including restrictions on the number of investors and on how the offering can be marketed.

- **Regulation D Restrictions on the Number of Investors.** The number of accredited investors is typically unlimited. Investors qualify as accredited investors if they meet specific conditions. Massachusetts securities law limits the number of non-accredited investors for an LLC to 25 and requires robust disclosure. The LLC could theoretically do more than one project; however, the LLC may not have sufficient funds (or net electrical usage among participants) to do more than one project.
- **Regulation D Restrictions on Marketing.** Private offerings cannot be advertised and are essentially limited to word-of-mouth marketing, among people with some pre-existing relationship. A private-offering memorandum and various legal agreements are still required, however, and can cost \$20,000 or more for professional services, such as customizing agreements, drafting the investor questionnaire and disclosure documents, preparing and filing notices with securities regulators, and setting up the legal mechanics of the company.

Business incorporation and securities requirements may change as a result of the JOBS Act. To follow developments related to the JOBS Act and crowd funding, project organizers should see <http://crowdfundingprofessional.org/about-3/news/>.

The Participant Ownership Model

- **Securing a Tax Equity Partner.** To take advantage of the significant tax benefits available for solar projects, a tax equity partner is likely needed. Involving a tax equity partner, however, can significantly increase the cost and complexity of the project.³⁸ Project organizers should carefully evaluate the costs and benefits of securing a tax equity partner. If securing a tax equity partner is not feasible, the project can benefit from the ITC if project organizers find participants with sufficient passive income. However, taking advantage of the ITC and the accelerated depreciation expense running through the LLC by identifying a tax equity partner or enlisting a sufficient number of participants with passive income may be challenging.
- **Availability of Net Metering Services.** Virtual net metering allows PV generation in one location to offset electricity costs at other locations. It is required only for the Virtual Net Metering approach discussed above.³⁹ Under this approach, virtual net metering is the tool used to deliver economic return on participants' investments. The LLC allocates net metering credits to participants through the Schedule Z; net metering credits are applied to participants' electric bills. To receive net metering credits via virtual net metering, participants must be within the same electric utility company's service territory and ISO-NE load zone as the CSS project.⁴⁰
- **SREC Risk.** Under the Participant Ownership model, the LLC, and therefore the participants, assume SREC risk. The Massachusetts SREC program is market-based, and future SREC values are inherently unknown. Project organizers can protect against this risk with careful due diligence and conservative SREC assumptions.
- **Participant Payment Structure.** Participation is formalized through an agreement with the LLC (see Section 6 for a sample LLC Operating Agreement). Participants' payment structure may vary (e.g., up-front fee for percentage output from the system or a monthly fee calculated per kilowatt-hour generated). Upfront investment in a CSS project can lower project financing costs, which, in turn, benefits both participants and the site owner. An up-front fee, however, may be cost-prohibitive to some prospective participants.

³⁸ For more information on the costs of acquiring tax equity see the National Renewable Energy Laboratory's §1603 Treasury Grant Expiration: Industry Insight on Financing and Market Implications, pg. 29. (2012). Available at <http://www.nrel.gov/docs/fy12osti/53720.pdf>

³⁹ The Alternative to Virtual Net Metering approach benefits from the availability of net metering services; however, virtual net metering is not required.

⁴⁰ Only investor-owned utilities in Massachusetts are required to offer virtual net metering.

The Participant Ownership Model

- ***Transfer of Benefits to Another Account, Location, or Participant.*** Under the Virtual Net Metering approach, project organizers can structure the participant agreement to provide some flexibility to participants that relocate or want to sell their ownership stake in a project. If a participant relocates outside of the electric utility company's service territory and ISO-New England load zone, they are no longer able to receive net metering credits, and they will have to sell their stake in the project. If a participant relocates within the same utility service territory and ISO-New England load zone and wants to continue participating, project organizers can adjust the Schedule Z to reallocate net metering credits to the participant's new utility account. However, a Schedule Z form can be amended only two times each year. To streamline this process and reduce administrative costs to the LLC, the participant agreement should limit the timing of changes in ownership. Under the Alternative to Virtual Net Metering Approach, there is no Schedule Z to adjust. The LLC could simply send the value of electricity and SRECs sold to the participant's new address.

The LLC should help sellers of shares in the CSS project identify potential buyers, and provide guidance on how to market an ownership stake in the project within applicable marketing constraints. The sale price will be determined by negotiations between the parties.

Implementing a CSS Project Under the Participant Ownership Model

Project organizers should take the following steps to implement a CSS project under the Participant Ownership model:

- Form a project team and begin to build support for the project. Project team members might include small business owners, professional service providers (such as attorneys and accountants), and community organizers;
- Start a local dialogue about CSS and generate project support by proactively addressing stakeholders' questions and concerns and market CSS efforts within applicable constraints;
- Identify potential CSS project sites;
- Estimate the potential benefits to the community at the identified project site(s);

The Participant Ownership Model

- Form a business entity by creating a limited liability corporation (LLC) and developing the prospectus package;⁴¹ and
- Secure a lease agreement (or a combined lease and PPA) with the site owner and system design, installation, and maintenance contract.

Forming a Project Team

Due to the complexities of this model, project organizers such as volunteers or paid staff should plan to invest potentially hundreds of hours to see a CSS project under the Participant Ownership model through to completion. In addition to general support, securing professional accounting and legal services is strongly recommended.

Who Should be Involved?

Team members may include the following:

- **Project Champion.** The most successful teams have at least one project champion who is the backbone of the project team and critical to a project's success. Renewable energy projects—especially cutting-edge projects like CSS—can be time-intensive. The project champion manages the time requirements of the project, organizes and motivates a strong team of supporters, and ensures that the project progresses even when other project team members may be unavailable. The project champion helps identify solutions in the face of opposition.
- **Community Leaders and Volunteers.** Getting local community groups, activists, and volunteers involved can increase the profile of the project and reduce the burden on project organizers. Consider energy and sustainability-focused disciplines at local academic institutions. Professors and students may have both valuable skills (e.g., financial modeling) and flexible schedules. Invite small business owners, financiers, and engineers—especially those with an interest or experience in energy, accounting, or finance—to lend their expertise. Tap into existing local volunteer energy committees to find people with demonstrated interest in community-scale sustainability.
- **Professional Services.** Project teams will encounter complex business incorporation, securities, contracting, and tax issues. It is strongly recommended that project teams engage an attorney and accountant to help with these aspects of the Participant Ownership model.

⁴¹ The development of an LLC Operating Agreement is driven by the specific facts of a project and does not lend itself to a one-size fits all template, and should therefore be developed in consultation with an attorney.

The Participant Ownership Model

- **Owner's Representative.** CSS is a relatively new concept, and these projects involve long-term contracts. An owner's representative is often helpful and/or necessary to provide the administrative capacity and technical expertise needed to make informed business decisions. Consultants or attorneys with expertise in solar PV or CSS can help project organizers maximize economic benefit and minimize risk to participant investors.
- **Tax Equity Investor.** To take advantage of the significant tax benefits available for solar projects, organizers must engage a tax equity partner. These tax benefits are significant,⁴² and they can make the difference in project feasibility. Because the demand for these investors far exceeds the supply, typical tax equity partners command a substantial return on their investment. Despite the challenges, the net tax benefits to a project are still so significant that the difficulty and costs of obtaining tax equity capital may be worth it for project organizers with the necessary acumen and resources. However, the time and cost required to secure a tax equity partner can be too great for many project teams.
- **Bank.** Banks can support CSS projects in several ways. Banks can provide a short-term loan to cover the costs of the PV system installation and offer loans to participants to cover the cost of their shares in the CSS project. A bank could also act as the tax equity partner. Partnering with a local bank reinforces the community-driven aspect of the Participant Ownership CSS project.



Clean Energy Collective, photo used with permission

*SMPA Community Solar Farm
Groundbreaking Ceremony
(July 31, 2012)*

⁴² The ITC can reduce the project cost by 30%. Depreciation of the remaining 85% of the cost (the owner's basis in the project is only reduced by half of the amount of the ITC) can save another 30% if the owner is in the typical 35% incremental tax bracket (35% of 85% equals 29.75%). Combined, these two tax benefits can cut the effective cost of the project by 60% for an owner that can take full advantage.

The Participant Ownership Model

Begin Discussions with the Local Electric Utility Company Contact

Meeting with representatives of the local electric company can be informative for CSS project teams. These discussions with utility account managers or the distributed generation department can help shape a CSS project and identify any fatal flaws.

The local utility should be approached in the early stages of project planning. Familiarity with interconnection and net metering will help the project team avoid questions and concerns later in project development. These discussions may reveal such issues as a lack of available net metering capacity.⁴³

Starting a Local Dialogue

Starting a local dialogue about CSS and garnering community members' support for a specific project during its early planning stages will help ensure a transparent and successful project.

What Motivates Stakeholders to Support a CSS Project?

To build project support, it is important to understand the motivations and concerns of the possible stakeholders, such as abutters, municipal officials and staff, and other community members.

Stakeholders are typically motivated by at least one of the following:

- **Economic Benefits.** Participants benefit from net metering credits (Virtual Net Metering approach) or revenue from the sale of electricity (Alternative to Virtual Net Metering approach); under both approaches, participants benefit from MassCEC rebate funds⁴⁴ and revenue from the sale of SRECs. The site owner benefits from lease revenue (Virtual Net Metering approach) or electricity cost savings through a PPA (Alternative to Virtual Net Metering approach).⁴⁵

It is important to note that each party's benefits are interrelated. The net economic

⁴³ The aggregate capacity of net metering facilities can be seen at www.MassACA.org.

⁴⁴ Participants benefit from MassCEC Commonwealth Solar rebate funds in an amount corresponding to the capacity of their ownership share in a CSS project, as these funds are granted on a capacity basis.

⁴⁵ Site owners can benefit from lease revenue in the Alternative to Virtual Net Metering approach; however, the per kWh PPA rate may increase.

The Participant Ownership Model

benefits of a CSS project are divided between the site owner and participants; a higher lease payment to the site owner hosting a CSS project, for example, will result in decreased value to the participating residents and businesses. Project organizers are encouraged to consider this relationship when negotiating lease agreements with potential site owners.

Project organizers should consider the potential for donations, volunteer support, and grants to maximize a project's economic benefits.

- **Non-Economic Benefits.** Some stakeholders' primary interest in solar PV projects is the environmental benefits, as well as interest in contributing to statewide greenhouse gas reduction targets and state and municipal renewable energy targets. A variety of resources for different audiences addressing these benefits are available online.⁴⁶
- **Other Entities Have Proven that this Works.** Across the country, private and public entities are developing and administering CSS projects. Stakeholders, such as prospective site owners or participants, may wish to contact parties involved with completed or ongoing CSS projects to discuss their experiences. Visits to nearby solar PV installations or CSS projects may be useful.⁴⁷

Marketing a Community Shared Solar Project

Marketing is often critical to the success of a CSS project. Through marketing, area residents and businesses are encouraged to participate in a CSS project; greater participation can translate to a larger, more cost-effective project, increasing participants' economic benefit. The securities exemption filing, however, restricts marketing for CSS projects under the Participant Ownership model.

⁴⁶ See, for example, the U.S. Department of Energy, U.S. Environmental Protection Agency, the National Renewable Energy Laboratory, and DOER websites.

⁴⁷ A table of existing CSS projects can be seen in "Community Shared Solar: Review and Recommendations for Massachusetts Models" (2013) .

The Participant Ownership Model

Project implementation will be less complex if: (1) offerings are limited to Massachusetts residents, and (2) project marketing and offering efforts are limited to pre-existing contacts of the core group of project organizers. Under these conditions, an extensive registration process at the SEC or state securities division can be avoided. Project organizers should consult an attorney before launching any marketing efforts.

Identifying Potential CSS Project Sites

To maximize a project's economic benefits, project organizers will want to identify potential project sites that are well suited for solar PV installations.

Given the time and costs of implementing a CSS project under the Participant Ownership model, project organizers should confirm technical (and therefore financial) feasibility at a proposed project site. Prospective installation contractors may be willing to conduct preliminary fatal flaws analyses of potential project sites as a part of their customer-acquisition process. Alternatively, an owner's representative could be consulted.

What Makes a Good Site?

In selecting a site, project organizers should consider the following:

- Project sites should have very little or no shading. Even small amounts of shading may have a significant impact on the output of a solar PV system. The most ideal rooftops for solar PV have few penetrations and obstructions (e.g., vents, rooftop units) as these create shading.⁴⁸
- For rooftop PV installations, sites with new roofs (e.g., less than five years old) are ideal. The useful life of solar PV systems can exceed 25 years.⁴⁹ If a PV system is installed on a roof that needs to be replaced during the lifetime of the CSS project, the combined cost of PV system removal, roof replacement, and PV system reinstallation can be very expensive.

⁴⁸ Project sites must also have sufficient load-bearing capacity to accommodate the weight of the PV installation. (A solar PV system typically adds an additional two to seven pounds per square foot to building static loads and can increase wind-loading on the roof deck.) Through the RFP and lease agreement, the municipality can require that the CSS vendor ensure that the site is appropriate for solar.

⁴⁹ National Renewable Energy Laboratory. "Distributed Generation Renewable Energy Estimate of Costs and Useful Life." June 2011: pg. 5. Available at: <http://www.nrel.gov/analysis/pdfs/dglcoedata.pdf>

The Participant Ownership Model

- In addition to roof space, consider underutilized open spaces, like closed and capped landfills, brownfields, undeveloped commercial property, gravel pits, and transfer stations. Sites that require significant tree clearing, site cleanup, or remediation, however, will increase project development costs and reduce participants' economic benefit. DOER strongly discourages siting solar in locations that require significant tree cutting, because of the important water management, cooling and climate benefits that trees provide.
- Prospective project sites should be free of zoning conflicts. Early in the planning stage, project organizers should consult with the local planning board to identify any potential zoning issues (e.g., solar PV projects in historic districts may be subject to restrictions) and to pursue any required zoning changes. Solar overlay districts and as-of-right siting can help pave the way for the development of CSS projects. For model zoning bylaw language, project organizers should reference the DOER's Model As-Of-Right Zoning Bylaw, which allows the use of large-scale ground-mounted solar PV installations, and model zoning bylaw and associated guidance for small and medium scale ground-mounted and roof-mounted solar.⁵⁰
- Consider high-performance buildings. Such buildings may have been designed to be solar-ready. Solar-ready buildings have limited penetrations and obstructions, are structurally suitable, and have appropriate electrical infrastructure.
- Consider potential limitations of the electric utility company distribution system at potential project sites. In certain sections of the distribution system called area networks, for example, solar PV systems often cannot be interconnected to the electricity grid due to concerns about grid reliability. Area networks are typically located in high density areas. For example, portions of the cities of Boston and Cambridge are within the local utility's area network. The interconnection capacity at a potential project site, or the ability of existing electrical infrastructure to accommodate a solar PV system, can also limit project location and capacity.

Project size is a function of useable space at a project site, how many participants enroll, and how much participants are willing to invest in the project. As securities laws limit the number of participants who can invest in the project and impose limitations on marketing, demand is best determined by reaching out to friends, family, and neighbors.

⁵⁰ Department of Energy Resources. Model As-Of-Right Zoning Bylaw: Allowing Use of Large-Scale Ground-Mounted Solar Photovoltaic Installations. March 2012. Available at <http://www.mass.gov/eea/docs/doer/green-communities/grant-program/solar-model-bylaw-mar-2012.pdf>. A model zoning bylaw with accompanying guidance for small- and medium-scale ground-mounted and roof-mounted solar will be available from DOER in Spring 2013.

The Participant Ownership Model

Estimating Costs and Benefits

In this section, we estimate the costs and benefits of a hypothetical CSS project following the Participant Ownership model. We consider both a scenario where virtual net metering is available and a scenario where virtual net metering is not available.⁵¹

The steps in calculating the benefits of the Participant Ownership model are:

- Determine the solar PV system capacity (kW) that can be accommodated at the proposed site and the expected energy generation (kWh);
- Calculate the applicable net metering rate and value of the net metering credits;
- Calculate the expected revenue from sales of Solar Renewable Energy Certificates (SRECs);
- Calculate the projected benefits of ownership;
- Calculate the investment required by participants; and
- Calculate the Simple Payback period for a participant's investment.

Kilowatts and Kilowatt-Hours

Kilowatt (kW) is a measure of power and a kilowatt-hour (kWh) is a measure of energy. These terms are used frequently throughout this guide. The generating capacity of a system, or the amount of power being consumed at one point in time, is measured in kW. The amount of energy consumed or generated over a period of time (e.g. one hour) is measured in kWh.

For example, if a home uses an average of 5 kW of power over a 2-hour period 10 kWh of energy have been consumed (kWh is kW multiplied by hours).

⁵¹ Examples and calculations are simplified for the purposes of this guide. Calculations following this approach will provide a preliminary estimate of benefits and highlight financial risks to participants, helping project organizers determine whether it makes financial sense to pursue the project. During development of a CSS project following the Participant Ownership model, it is strongly recommended that project organizers seek professional assistance to establish a thorough cash flow projection of current and future costs and revenues. Results will vary depending on a number of factors, such as whether the ITC is taken and, if so, how it is monetized. Another key factor in the cash flow assessment will be the assumed value of SRECs. SREC values are not guaranteed; it is strongly recommended that project organizers are conservative with their SREC assumptions. Sample documents from the Harvard Solar Garden project (Harvard, Massachusetts), an example of the Participant Ownership model with Virtual Net Metering, can be seen at www.hsgarden.org.

The Participant Ownership Model

Step 1: Expected Energy Generation

Solicitation documents should require prospective bidders to provide preliminary estimates of annual energy generation for the proposed project site. These estimates will be refined by the selected contractor after detailed engineering studies, such as a structural feasibility analysis, are completed. In the planning phase, however, project organizers can use simple tools and guidelines to estimate system capacity and annual energy generation.

Estimate Solar PV Capacity (kW)⁵²

Solar PV system capacity can be estimated by multiplying the site area by an assumption about the capacity that can be accommodated in a given area. For preliminary cost and benefit analyses, it is reasonable to assume 3.5 kW per 1,000 square feet.⁵³

Step 1: Calculating PV System Capacity

$$\text{PV System Capacity (kW)} = \text{Project Site Area (square feet)} \times (3.5 \text{ kW}) / (1,000 \text{ square feet})$$

Example

Project organizers identify a privately owned building as a potential project site. The building's roof is less than five years old, no repairs are needed, and shading is minimal. Using the building's footprint in square feet or free Web-based applications (for example, using the "Ruler" tool in Google Earth to estimate the area of each section of flat roof), project organizers estimate that the total useable roof area at the school is 30,000 square feet. They also assume 3.5 kW per 1,000 square feet, as some equipment and vents create shading on the roof.

Total Estimated Roof Area=30,000 square feet

$$\text{PV System Capacity (kW)} = 30,000 \text{ sq.ft.} \times 3.5 \text{ kW} / (1,000 \text{ sq.ft.}) = 105 \text{ kW}$$

⁵² Solar capacity as used in this guide refers to "DC" or "direct current capacity." This refers to the power coming directly from the PV modules before it is converted to "AC" or "alternating current" power by an inverter for use at a building.

⁵³ Typical flat roof commercial installations require 1,000 square feet of useable roof space to accommodate two to five kW of solar PV. If the roof has multiple levels and many obstructions (e.g., HVAC equipment) that create shading, this value may be closer to 2 kW. If obstructions are limited and the architecture is relatively simple, this value may be closer to 5 kW. When estimating useable space for rooftop solar PV projects, project organizers should disregard any roof sections that require repair or renovation.

The Participant Ownership Model

Estimate Annual Energy Generation (kWh)

Annual energy generation (kWh) can be calculated using estimated PV system capacity (kW). In Massachusetts, a typical solar PV system produces 1,200 kWh of energy per year for every kW of capacity. Free Websites and software tools are available to help estimate energy generation. PVWatts, for example, is a free online tool developed by the National Renewable Energy Laboratory (NREL).⁵⁴

Standard Inputs for Solar PV Generation Tools – Commercial Flat Roof Scenario

Project organizers aim to use PVWatts to estimate the annual energy generation of the PV system. PVWatts requires users to provide various inputs. For commercial PV projects on flat roofs, the following inputs can be used:

Array Type =Fixed Tilt
Array Tilt=20 Degrees*
Array Azimuth=180 Degrees**

*For sloped roofs, the PV system array tilt will equal the slope of the roof.

**For sloped roofs, the azimuth is equal to the orientation of the roof with due south set at 180 degrees. A directly southwest facing roof has an azimuth of 225 degrees, while a directly southeast facing roof has an azimuth of 135 degrees.

Example

To estimate annual energy generation for the 105 kW PV system, project organizers enter the following information into PV Watts Version 1.0.

City: Boston*
DC Rating (kW): 105**
Array Tilt (Degrees): 20
Array Azimuth (Degrees): 180
PVWatts Estimated Annual Energy Generation= 126,821 kWh

*For Massachusetts projects, PVWatts Version 1.0 users can select either Boston or Worcester.

**In PVWatts, PV system capacity is called “DC Rating.”

⁵⁴ PVWatts Version 1.0 is the simplest version of this tool to use; however, Version 2.0 offers additional features to users. Version 1.0 and Version 2.0 of PVWatts are available at www.nrel.gov/rredc/pvwatts/.

The Participant Ownership Model

Step 2: Net Metering Credits

Under the Participant Ownership model, participants benefit from net metering credits applied against their electric bills. The annual value of these credits is the product of the value of individual net metering credits (the net metering credit rate) and the estimated annual energy generation.

Net Metering Credit Rate

Net metering credit rates vary across the Massachusetts utilities. The net metering credit rate for a particular project is determined by the electric rate customer class assigned by the utility to the host customer. For CSS projects that require virtual net metering, the Small Commercial (e.g., G-1) rate class will likely be assigned. Typically, this rate class generates the greatest economic value for net metering credit recipients.

Net metering credit rates can vary throughout the year. It is possible, for example, for rates to change two cents per kWh or more during a calendar year. In a preliminary economic analysis, seasonal rates can be averaged to account for these variations.

Correctly calculating net metering credit rates can be a complex, time-intensive process. Project organizers should contact the local utility to confirm the current net metering credit rate using the Small Commercial rate class. To calculate the credit manually, locate the applicable electric utility company's current tariff,⁵⁵ and total the utility charges seen in Table 5 for the Small Commercial rate class.^{56,57}

⁵⁵ Electric utility company tariffs are available through the Department of Public Utilities Website. See <http://www.mass.gov/eea/energy-utilities-clean-tech/electric-power/electric-tariffs/electric-company-tariffs.html>.

⁵⁶ The calculated net metering credit rate applies to private projects up to 1 MW(AC) in size.

⁵⁷ For more information on calculating net metering credit rates, see the DOER's "Massachusetts [Distributed Generation] and Interconnection Main Page." (Available at: <https://sites.google.com/site/mass-dgic/home/net-metering>).

The Participant Ownership Model

Table 5: Calculating Net Metering Credit Rates

For a CSS Project, Add the Utility Charges Below for the Small Commercial Rate Class	
Distribution Charge	[obtain local rate]
Transition Charge	[obtain local rate]
Transmission Charge	[obtain local rate]
Basic Service	[obtain local rate]
Total Net Metering Credit Rate	\$ per kWh

Annual Value of Net Metering Credits

The example below outlines how project organizers can estimate the annual value of net metering credits.

Step 2: Calculating Annual Value of Net Metering Credits

Annual Value of Net Metering Credits (\$) = Net Metering Credit Rate (\$/SREC) × Annual Energy Generation (kWh)

Example

Following the procedure in the table above, project organizers calculate a net metering credit rate of \$0.16 per kWh and confirm this rate with the local utility. This information is used to approximate the annual value of net metering credits from a CSS project at the private building.

Estimated Annual Energy Generation = 126,821 kWh

Net Metering Credit Rate (\$ per kWh) = (\$0.16)/kWh

Annual Value of Net Metering Credits (\$) = 126,821 kWh × (\$0.16)/kWh = \$20,291

The Participant Ownership Model

Step 3: SREC Sales

Participants will also benefit from the sale of SRECs. To estimate participants' benefits, a projection of future SREC values over the lifetime of the project is needed. An SREC is created each time a qualified solar PV system generates one MWh (1000 kWh) of electricity.⁵⁸ The projected values should be developed with an understanding of the variability in SREC prices and the financial risk associated with this variability. It is strongly recommended that project proponents seek assistance from those familiar with the SREC market when establishing these projections.⁵⁹

Since its establishment, the SREC market has seen substantial price variability. In 2011, SRECs were sold for \$500 or more; however, prices dropped for 2012 certificates due to an oversupply in the market. In some cases, SREC sellers were offered less than \$200. DOER has proposed changes to the program that are intended to stabilize SREC prices, which would reduce financial risk to CSS project participants.

The examples below assume SREC prices of \$285 for 10 years.⁶⁰ This is the auction sale price (\$300) in the annual SREC Solar Credit Clearinghouse auction established by DOER minus the 5% auction fee charged by the Department. While most SRECs are sold in the market, this annual auction is intended to provide a last resort option for SRECs that remain unsold at the end of the compliance year. The auction price of \$285 is used here as a placeholder for average SREC prices during the term of the project; however, this price is used for illustrative purposes only.

⁵⁸ For more information on qualifying units, see "Statement of Qualification Application" at <http://www.mass.gov/eea/energy-utilities-clean-tech/renewable-energy/solar/rps-solar-carve-out/statement-of-qualification-application.html>.

⁵⁹ For more information about the Massachusetts Solar Carve-Out program and the Massachusetts SREC market, please see: www.mass.gov/eea/energy-utilities-clean-tech/renewable-energy/solar/rps-solar-carve-out/ or email DOER.SREC@state.ma.us.

⁶⁰ While some revenue from SREC sales can be generated after 10 years, the examples provided in this guide assume no revenue for sales after 10 years.

The Participant Ownership Model

Step 3: Calculating SREC Revenue

$\text{SREC Revenue (\$)} = \text{SREC Price (\$/kWh)} \times \text{Energy Generation (kWh)}$

Example

Project organizers estimate that they can sell SRECs at a price of \$285 per SREC over a 10-year period.

Annual Energy Generation = 126,821 kWh

$\text{SREC Revenue (\$)} = 126 \text{ SRECs} \times (\$285)/\text{SREC} = \$35,910 \text{ annually}$

Over 10 years, total SREC revenue is anticipated to be \$359,100.

Step 4: Projected Benefits of Ownership

Under the Participant Ownership model, participants may benefit from both net metering credits applied against their electric bills and revenue from the sale of SRECs.

Step 4: Calculating Participants' Economic Benefit

$\text{Economic Benefit (\$)} = \text{Net Metering Credits (\$)} + \text{SREC Revenue (\$)}$

Example

Project organizers estimate that the project will generate \$20,921 worth of net metering credits and \$35,910 from the sale of SRECs each year. Twenty participants are anticipated to take an ownership stake in the CSS project.

Annual SREC Revenue (\$) = \$35,910

Annual Value of Net Metering Credits (\$) = \$20,921

Anticipated Number of Participants = 20

$\text{Economic Benefit (\$)} = \$20,921 + \$35,910 = \$56,831$

Assuming that each participant owns an equal share of the project (that is, 5.25 kW of the 105 kW project), the annual economic benefit to each participant is \$2,842.

The Participant Ownership Model

Step 5: Investment Required by Participants

In this guide, we assume that participants make a one-time up-front cash payment.⁶¹ This step involves several assumptions, which are outlined below. Project organizers should update these assumptions with current information that is specific to their project.

- PV System Capacity: 105 kW
- PV System Installed Cost: \$420,000. The cost of PV systems has dropped substantially over the last five years. This installed cost is based on an assumed price of \$4,000 per kW. (Solar prices are commonly discussed in terms of price per Watt, so in this example, the price is \$4/Watt).
- Operations and Maintenance and Other Costs: \$100,000. This figure represents the assumed one-time cost to participants to: (1) hire the installation contractor to provide ongoing monitoring and maintenance of the PV system; (2) pay a lease fee to the site owner for use of the space; (3) insure the system; (4) and pay any fees associated with development and administration of the CSS, including fees for attorneys or other professional services. In total, it is assumed that operations and maintenance will cost an average of \$0.04 per kWh over the life of the contract (20 years assumed).
- Monetized Tax Benefits: \$147,000 (35% of installed cost). If a tax equity partner is involved, the tax equity partner monetizes the ITC and other tax benefits.
- MassCEC Rebate: \$42,000. MassCEC Commonwealth Solar rebates can be applied to CSS projects where participants have an ownership stake. In this example, it is assumed that the value of the MassCEC rebate is \$400 per kW.⁶²

The combined investment from participants required to fund the CSS project (that is, installation and operations over the lifetime of the system) can be estimated by subtracting the incentives (monetized tax benefits and MassCEC rebate) from the lifetime cost.

⁶¹ More sophisticated approaches could incorporate, for example, financing through bank loans for participants. The calculation of costs and benefits would need to be adjusted accordingly.

⁶² For more information on MassCEC rebates offered through the Commonwealth Solar program go to: www.masscec.com/solar.

The Participant Ownership Model

Step 5: Calculating Participants' Investment

Investment(\$)=Lifetime Cost (\$)- Incentives(\$)

Example – Estimating Participants' Investment

To estimate participants' combined investment, project organizers subtract the incentives from the lifetime cost.

Anticipated Number of Participants=20

PV System Installed Cost=\$420,000

Operations and Maintenance and Other Costs= \$100,000

Monetized Tax Benefits=\$147,000

MassCEC Rebate=\$42,000

Lifetime Cost (\$)= \$420,000 + \$100,000 = \$520,000

Incentives (\$)= \$147,000 + \$42,000 = \$189,000

Participants' Investment(\$)= \$520,000 - \$189,000 = \$331,000

Assuming that each participant owns an equal share (that is, 5.25 kW of the 105 kW PV system), the required one-time, up-front investment from each participant is calculated to be \$16,550.

Step 6: Simple Payback Period

The simple payback period can be calculated by dividing participants' investment by participants' economic benefit. This will provide an estimate of the number of years it will take for participants to recoup their investment.



*Poudre Valley REA Community
Solar Farm Dedication Ceremony
(Aug. 28, 2012)*

Source: Clean Energy Collective, photo used with permission

The Participant Ownership Model

Step 6: Calculating Participants' Simple Payback

Simple Payback (years)= (Participants' Investment (\$))/(Annual Economic Benefit (\$))

Example – Estimating Participants' Simple Payback

Project organizers from the example above estimate that participants will collectively invest \$331,000 and receive \$56,831 annually in economic benefits through net metering credits and SREC sales.

Participants' Investment (\$)= \$331,000 (\$16,500 per participant)

Annual Economic Benefit (\$)= \$56,831 (\$2,842 per participant)

Simple Payback =(\$331,000)/(\$56,831) =5.8 years

Assuming that each participant owns an equal share (that is, 5.25 kW of the 105 kW PV system), each participant will invest \$16,550, receive \$2,842 annually in economic benefits, and recoup their investment in approximately six years.

Without Virtual Net Metering Services

The Alternative to Virtual Net Metering approach involves a combined lease and PPA between the site owner and the LLC. The site owner pays the LLC for 100% of the power generated by the PV system. In this approach, the power is delivered behind the existing utility meter at the site. From the site owner's perspective, this will look like a typical PPA project.

When estimating participants' economic benefits and simple payback period in this approach, we consider revenue from the site owner's PPA payments rather than the value of the net metering credits applied against participants' electric bills.

The Participant Ownership Model

Calculating Participants' PPA Revenue and Economic Benefit (Virtual Net Metering Services Not Available)

PPA Revenue (\$) = Annual Energy Generation (kWh) × PPA Rate (\$ per kWh)

Economic Benefit (\$) = PPA Revenue (\$) + SREC Revenue (\$)

Example

The site owner agrees to pay the LLC the same rate for electricity from the PV system as they currently pay for electricity from the grid (\$0.12 per kWh). Virtual net metering is not available.

Participants' Investment (\$) = \$331,000

Annual Energy Generation = 126,821 kWh

SREC Revenue (\$) = \$35,910 annually

PPA Revenue (\$) = 126,821 kWh/yr × (\$0.12)/kWh = \$15,219 annually

Economic Benefit (\$) = \$15,219 + \$35,910 = \$51,129 annually (\$2,556 per participant)

Simple Payback = (\$331,000)/(\$51,363) = 6.5 years

Assuming that each of the 20 anticipated participants owns an equal share (that is, 5.25 kW of the 105 kW PV system), each participant will receive \$2,556 annually in economic benefits and recoup their investment in approximately 6.5 years.

Forming a Business

If project organizers elect to move forward with a project, they must create the LLC and develop the prospectus package. The project team should be prepared to invest a significant amount of time into studying, researching, planning, marketing, implementing, and managing their CSS project. Professional legal assistance is strongly recommended for this stage of the project.

Create the LLC

In the Participant Ownership model, project organizers establish a private company to raise investment funds for the CCS project and provide participants with a return on their investment. Although other private or not-for-profit types of corporations can be used for a CSS project, an LLC is typically the most advantageous organization type.⁶³

⁶³ "Community Shared Solar: Review and Recommendations for Massachusetts Models" (2013) details alternative approaches.

The Participant Ownership Model

To form the LLC, complete an application for Certificate of Organization with the Massachusetts Secretary of State's Office. An application for a Certificate of Organization requires a \$500 filing fee and annual reports must be filed.⁶⁴ Organizers must develop an operating agreement for the LLC. An operating agreement is like an instructional manual for the LLC. For example, it establishes the rules for how the LLC will be managed, how profits and losses will be distributed, and whether and how members may sell their ownership stake. The development of an LLC Operating Agreement is driven by the specific facts of a project and does not lend itself to a one-size fits all template, and should therefore be developed in consultation with an attorney. A sample LLC Operating Agreement is provided in Section 6. Sample documents from the Harvard Solar Garden project (Harvard, Massachusetts), an example of the Participant Ownership model with Virtual Net Metering, can be seen at www.hsgarden.org.

Develop the Prospectus Package

A prospectus package contains the information and forms to be used to enlist participants in the CSS project. A prospectus package should contain financial details, such as anticipated CSS project installed costs, operating expenses, revenue (e.g., from site owner's purchase of power), and other details of the financial projections. In addition, the prospectus package should contain a securities exemption form and investor questionnaire. The securities exemption form and investor questionnaire are used to file for an exemption from federal and state securities reporting requirements.⁶⁵ Participants complete this form with a participant agreement. Sample documents are provided in Section 6. Sample documents from the Harvard Solar Garden project can be seen at www.hsgarden.org.

Secure Lease Agreement and System Design, Installation, and Maintenance Contract

Project organizers will need to negotiate two contracts: a lease agreement with the site owner and an installation and maintenance agreement with a contractor.

⁶⁴ Information, forms, and an online application option are available at <http://www.sec.state.ma.us/>.

⁶⁵ More information is available at www.sec.gov/info/smallbus/cfformd.htm.

The Participant Ownership Model

Connect with Potential Solar PV Contractors

Project organizers should invite prospective engineering, procurement, and construction (EPC) contractors, especially those with Massachusetts experience, to help refine the project team's understanding of solar PV system design, installation, maintenance, and decommissioning and its associated costs. Ideally, the contractor should have experience with solar PV projects similar in size and scope to the CSS project under consideration. Project organizers may conduct a competitive process for the installation contract; therefore, this meeting will also help prepare the project team to evaluate bidders' responses.

Lease Agreement

When negotiating a lease agreement, project organizers should consider the following:

- Project organizers consider the impacts of the lease revenue expectations of the prospective site owners. As lease revenue to the site owner increases, participants' economic benefit may decrease.
- The lease term should match or exceed the expected lifetime of PV system. One way to minimize risk to the LLC and the site owner is to specify an initial term (e.g., 10 years) with optional lease extension terms (e.g., optional 5-year extension terms). This ensures that the lease is in place for the useful life of the solar PV system and avoids lease payments that extend beyond its useful life.
- Project organizers should carefully consider site owner negligence that may result in damage to the PV system and lost revenue from decreased energy generation. Security for the PV system by controlled access to the site or security equipment should also be considered.
- The lease agreement should outline site maintenance specifics (e.g., mowing grass at a ground-mounted system), and each party's responsibilities should be clearly document-

The Participant Ownership Model

ed. The LLC will likely assume responsibility for all site maintenance. Special strategies and procedures (e.g., replacing surrounding vegetation with low-growth vegetation) may be warranted to protect the PV system from damage.

- The contractor selected to install and maintain the PV system should be involved in the lease negotiations. The contractor may have important security, site maintenance, and site access requirements.

System Design, Installation, and Maintenance Contract

In the final phases of a project, organizers will contract for the design, installation, and ongoing monitoring and maintenance of the CSS project. Project organizers will likely want to hire a qualified contractor to manage these tasks. To ensure that the LLC is getting the best value in the project development phase, organizers are encouraged to obtain qualifications and quotes from multiple contractors and, if applicable, third-party system PV maintenance providers.

For projects following the Virtual Net Metering approach, the installation contract should require that the PV system be designed such that all of the electricity produced by the PV system goes toward generating net metering credits.

The installation contract should also require the contractor to supply a comprehensive commissioning plan. A comprehensive commissioning plan ensures safety and performance testing of the installed PV system.

Participants' economic benefit is a function of the solar PV system's performance, necessitating careful system monitoring and maintenance. A multi-year contract for maintenance services is highly recommended. The selected contractor or a solar PV maintenance provider can provide these services. The operations and maintenance at a minimum should include performance monitoring and cover labor costs associated with any routine maintenance, troubleshooting, and repairs.⁶⁶

⁶⁶ For more information about operations and maintenance contract considerations, see The Guide to Developing Solar Photovoltaics at Massachusetts Landfills. Available at <http://www.mass.gov/eea/docs/doer/green-communities/pubs-reports/pvlandfillguide.pdf>.

The Participant Ownership Model

Other Factors to Consider

Project organizers should consider potential challenges to CSS project development, such as zoning, permitting, and property taxes.⁶⁷

Zoning

A zoning exemption under M.G.L. c. 40A §3 provides solar energy systems with special status, noting: “No zoning ordinance or by-law shall prohibit or unreasonably regulate the installation of solar energy systems or the building of structures that facilitate the collection of solar energy, except where necessary to protect the public health, safety or welfare.”

Some municipalities do not have zoning bylaws in place; while others have created bylaws/ordinances in an effort to provide reasonable regulations that protect public health and safety. It is important to be aware of a municipality’s zoning bylaws related to solar before proceeding with a CSS project.

Local Permits

Local permit requirements and costs will vary across jurisdictions. Requirements for building and electrical permits vary by municipality. Project organizers should consult with the local building department in the project planning phase.

Property Taxes

Uncertainties related to property taxes can significantly impact project economics for all parties involved in solar PV projects. Although M.G.L. c. 59, §5 (45) provides a property tax exemption for solar and wind energy systems, this exemption applies only to projects that are “being utilized as a primary or auxiliary power system for the purpose of heating or otherwise supplying the energy needs of property taxable” under chapter 59.⁶⁸ The Department of Revenue’s Division of Local Services has interpreted this provision as requiring the use of the energy to be used at the site of the taxable property. Therefore, a CSS project would not be tax exempt.

⁶⁷ Additional details on widespread and Massachusetts-specific challenges to CSS are detailed in “Community Shared Solar: Review and Recommendations for Massachusetts Models” (2013).

⁶⁸ M.G.L. c. 59 § 5, cl.45 reads, “Any solar or wind powered system or device which is being utilized as a primary or auxiliary power system for the purpose of heating or otherwise supplying the energy needs of property taxable under this chapter; provided, however, that the exemption under this clause shall be allowed only for a period of twenty years from the date of the installation of such system or device.”

The Participant Ownership Model

A Payment in Lieu of Tax (PILOT) agreement may be negotiated as an alternative to property taxes.^{69,70} Ultimately, the local assessing authority makes the determination of the method and amount of taxation of these types of systems.

Although comprehensive guidance recommending a specific assessment methodology is currently unavailable, DOR has provided workshops throughout the Commonwealth to provide local assessors with the tools and methodology for valuing solar PV systems for the purpose of local taxation or for negotiation of payment in lieu of taxes (PILOT) agreements. Before proceeding with a CSS project, the tax implications for the system and the impact on the project economics must be determined.



Source: Clean Energy Collective, photo used with permission

⁶⁹ See M.G.L. c.164, §1, Definitions.

⁷⁰ For more information about property taxes and PILOT agreements, please contact the Massachusetts Department of Revenue at 617-626-2400. Also see The Guide to Developing Solar Photovoltaics at Massachusetts Landfills. Available at <http://www.mass.gov/eea/docs/doer/green-communities/pubs-reports/pvlandfillguide.pdf>.

The Participant Ownership Model

Section 5: Conclusion

Community Shared Solar provides an opportunity to open the solar market to those unable to install solar PV at their home or business. Massachusetts, with its Solar Carve-Out program and virtual net metering, is particularly well-suited for the development of CSS projects.

Resources provided in this guide are intended to help prospective project organizers evaluate, plan, and implement CSS projects in their communities. As a first step, it is important to determine which business model is most appropriate for the circumstances. The Public Lease model (detailed in Section 3) is most appropriate where a public entity, such as a municipality, is willing and able to facilitate the CSS project and act as the site owner. The Participant Ownership model (detailed in Section 4) is most appropriate where private parties aim to develop a CSS project on private property and take an ownership stake in the project. See Table 6 for a summary of these two models.

Project organizers have a number of choices to make. Information provided in this guide, as well as “Community Shared Solar: Review and Recommendations for Massachusetts Models” (2013) may help inform CSS efforts. In addition, the following resources may be a helpful resource for those considering a CSS project:

- A Guide to Community Shared Solar: Utility, Private, and Nonprofit Development was updated in May, 2012 by the National Renewable Energy Laboratory (NREL). Its 72 pages include a comprehensive treatment of solar models, case histories, state policies, tax policies, securities issues, and resources. It can be found at <http://www1.eere.energy.gov/solar/pdfs/54570.pdf>.
- Community Solar Power: Obstacles and Opportunities (2nd edition) was published in October, 2011 by the Institute for Local Self-Reliance (ILSR). Its 38 pages include case histories, models, barriers, policies, and a unique scorecard rating of existing projects. It can be found at www.ilsr.org/community-solar-new-model-local-ownership.
- Community Renewables: Model Program Rules was published in November, 2010 by the Interstate Renewable Energy Council (IREC). It includes guiding principles, definitions, and model rules for CSS projects that involve virtual net metering. http://irecusa.org/wp-content/uploads/2010/11/IREC-Community-Renewables-Report-11-16-10_FINAL.pdf
- The Northwest Community Solar Guide was published in 2009 by the Bonneville Environmental Foundation (BEF) and Northwest Sustainable Energy for Economic Development (SEED). It includes case studies, project economics, incentives, and an overview of the steps for smaller, do-it-yourself CSS projects. www.nwseed.org/documents/NW%20Community%20Solar%20Guide.pdf
- The Community Solar Tool developed by the University of Oregon offers Web-based project planning support. <http://communitysolar.dyndns.org>

Conclusion

- The Community Power Network serves as a clearinghouse for information on CSS. <http://communitypowernetwork.com>
- The Solar Gardens Institute (SGI) also provides a broad array of information. The map on their home page shows both: (1) existing CSS projects; and (2) SGI solar gardens, which are local people or groups who are interested in building a CSS project. www.solargardens.org
- §1603 Treasury Grant Expiration: Industry Insight on Financing and Market Implications was published in June, 2012 by NREL. It describes the challenges faced by solar project developers due to the expiration of the 1603 program and the need to once again find tax equity partners in order to take advantage of the ITC and accelerated depreciation. www.nrel.gov/docs/fy12osti/53720.pdf
- Securities Law Issues Relating to Community Solar Projects is a memorandum developed in 2009 by the Stoel Rives law firm for NREL. <http://nwcommunityenergy.org/solar/financing/NREL%20%20Securities%20Memo.pdf>

Conclusion

Table 6: Summary, Public Lease and Participant Ownership Models

	Public Lease Model	Participant Ownership Model	
		Virtual Net Metering Approach	Alternative to Virtual Net Metering Approach
Project Facilitator	Public Entity	Participants (specifically, project organizers)	Participants
Project Site (Site Owner)	Public Buildings or Land (Public Entity)	Private Buildings or Land (Private Entity)	Private Buildings or Land (Private Entity)
System Owner	CSS Vendor or private third party	Participants	Participants
What Benefits do Participants Receive?	Net Metering Credits	Net Metering Credits, SREC Revenue, MassCEC Rebates, Federal Tax Credits	Net Metering Credits, SREC Revenue, MassCEC Rebates, Federal Tax Credits (potentially)
Virtual Net Metering	Required	Required	No. The PV system is interconnected on the load side of the building's electrical meter. Energy generated by the PV system directly serves the building's load.
Do Participants have an Ownership Stake in the Project?	No	Yes	Yes
Required Documents	<ul style="list-style-type: none"> • RFP and contract for lease of site (M.G.L. c. 30B§16) • Net metering credit allocation agreement between aggregator and participants 	<ul style="list-style-type: none"> • Lease agreement • Business incorporation documents • SEC registration exemption • Net metering credit allocation agreement between LLC and participants • Project installation and operations and maintenance agreements 	<ul style="list-style-type: none"> • Lease agreement • PPA with site owner • Business incorporation documents • SEC registration exemption • Project installation and operations and maintenance agreements

Conclusion

Section 6: Sample Contract Documents

The sample project documents included within Section 6 are for illustrative purposes only. The Massachusetts Department of Energy Resources does not accept any responsibility for any party's use of these sample project documents, or assure the accuracy or legality of any provisions contained herein. As with any legal document and if you have any questions on the legal requirements that apply to your project, consult your attorney.

Sample contract documents provided in this section include the following:

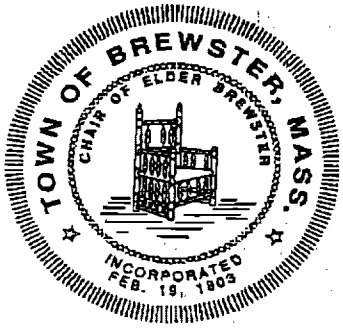
- M.G.L. c.30B Request for Proposals (Brewster Community Solar Garden, Public Lease model)
- M.G.L. c.30B Lease Agreement (Brewster Community Solar Garden, Public Lease model)
- Prospectus (University Park Community Solar, Participant Ownership model, Alternative to Virtual Net Metering approach)
- LLC Operating Agreement (University Park Community Solar, Participant Ownership model, Alternative to Virtual Net Metering approach)
- Participant Agreement and Investor Questionnaire (University Park Community Solar, Participant Ownership model, Alternative to Virtual Net Metering approach)
- Power Purchase Agreement (University Park Community Solar, Participant Ownership model, Alternative to Virtual Net Metering approach)
- Engineering, Procurement, and Construction (EPC) Contract (University Park Community Solar, Participant Ownership model, Alternative to Virtual Net Metering approach)

In addition, sample documents from the Harvard Solar Garden project (Participant Ownership model, Virtual Net Metering approach) are available at www.hsgarden.org. Harvard Solar Garden documents available for review include the following:

- FAQ
- VP Calculator (This calculator was a tool used to estimate participants' costs)
- Financial Projection for Securities Public Disclosure (Consolidated Balance Sheet)
- Sample Application
- Sample Purchase and Sale Agreement - Finance Option
- Sample Purchase and Sale Agreement - No Finance Option
- Financial Model

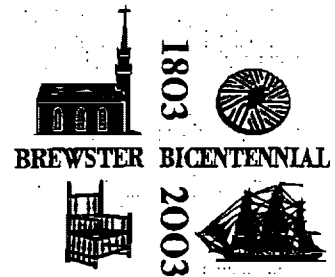
Sample Contract Documents

M.G.L. c.30B Request for Proposals



**Board of Selectmen
Town Administrator**

2198 Main Street
Brewster, Massachusetts 02631-1898
(508) 896-3701
FAX (508) 896-8089



**Request for Proposals:
Lease of Municipal Property and
Development of Photovoltaic Energy Production System(s)
November 2010**

The Town of Brewster seeks proposals from qualified *Vendors* to design, engineer, construct, own, and maintain new Photovoltaic (Solar Electric) System(s) and associated infrastructure on land and/or buildings leased from the Town. The purpose of the solar installation(s) is(are) to support the local community's electrical supply and to render municipal properties more productive, generating electricity from renewable and clean sources and to produce lease revenue to the Town.

Photovoltaic installations are to be constructed on municipal land and/or buildings. Some options for locations are described in **Exhibit A**, attached hereto, but Vendors are encouraged to propose installations at/on any Town facilities where the Vendor deems installation will be feasible and cost effective. The primary purpose of the facility (facilities) is/are for the generation of renewable energy from solar photovoltaic conversion. The guidelines and criteria for qualification and selection of *Vendors* are detailed herein.

Successful *Vendor(s)* will be selected to be the "*System Owner*" who will be responsible for constructing and owning the PV system and related facilities, establishing interconnection of the system to the utility grid, and maintaining the system and related facilities for a period of no less than fifteen (15) years with sequential five-year (5-year) lease extension options of up to a total of thirty (30) years. The Town of Brewster will enter into a lease with the *System Owner* to use the underlying land, roof space, or surface area (s) for the System and facilities. *Vendors* making proposals may be any party interested in owning, constructing, maintaining the System and related facilities. Selection criteria and considerations will include, but not be limited to, the following:

1. Direct financial benefit to the Town.
2. Demonstrated benefit to residents, businesses, other tax payers located within the Town.
3. Proposal's ability to combine compatible uses at each site for optimum productivity.
4. Proven performance and capability of the *Vendor*, its partners, contractors and any proposed sub-contractors.

Submissions must be received in the Town Administrator's Office at 2198 Main St., Brewster, MA 02631, no later than **3:00 p.m. on Monday, December 27, 2010** to be considered.

Modification/Withdrawal

Proposals may be corrected, modified or withdrawn prior to the Proposal Submission Deadline by submitting the required number of copies of such correction, modification, withdrawal or new submission, clearly marked on the outside envelope with the appropriate heading, by the Proposal Submission Deadline.

Waiver of Formalities

The Chief Procurement Officer reserves the right to waive any minor formalities or omissions contained in this RFP and may request that Proposers provide supplemental information and/or meet with representatives of the Town to assist the Selection Committee and Chief Procurement Officer.

Rejection Language

The Chief Procurement Officer reserves the right to reject any and all proposals if the Chief Procurement Officer deems it to be in the best interests of the Town to do so, this includes rejecting a single proposal and awarding the contract to the next most responsive, responsible, qualified proposer, or rejecting all proposals and awarding the contract to no one.

Rule for Award

The most advantageous offer from a responsive and responsible proposer, taking into consideration all evaluation criteria and price, will be selected.

I. Sites and Existing Conditions:

The Town will consider installations on any Town-owned facilities or land, however, priority will be given to proposals designed for the following locations:

- The Brewster Water Facility and grounds near 165 Commerce Park

- The capped portion of the Brewster Landfill located off Run Hill Road.

- The Town sand pit located on Great Fields Road (at the Rte 124 end)

- The roofs of the Golf Cart Storage and Maintenance Buildings at Captain's Golf Course (1000 Freeman's Way)

- The western overflow parking lots and grounds at the Captains Golf Course (1000 Freeman's Way)

II. Expected Results:

Installations will be designed, engineered and constructed, to meet State safety and performance criteria and will generate electrical power for either sale to either the site where they are located or to the Grid, with a lease payment being paid to the Town for the term of the lease.

Proposed roof installations must include proof of professional structural and physical evaluation verifying stability and capacity of underlying structures, to safely and securely support the proposed installation. Submissions must include written and visual details on proposed mounting brackets and supports.

Proposed ground-mounted installations must include proof of professional hydro-geologic evaluation verifying stability and capacity of underlying soils, surfaces and features, to safely and securely support the proposed installation. Submissions must include written and visual details on proposed mounting brackets, supports and footings of ballast arrangements, and details as to proposed maintenance of surfaces and features within the areas below and around the panels.

Lease(s)

The Town seeks to contract with a qualified *Vendor* to design, engineer, construct, own and maintain the new System(s), with any associated installations, structures, and site improvements. The System(s) and installation(s) shall conform to a footprint within an area or areas, which are owned by the Town and will be leased to the Vendor for a minimum of twenty (20) years with two (2) five-year (5-yr) options to extend the total lease for up to thirty (30) years.

The areas proposed for lease are generally shown in approximate outline on the topographic maps of each potential site, attached hereto as **Exhibit B**. Additional and alternative locations may be proposed by submitting additional site maps, plans and site identification details. Dimensions and specifics of the areas to be leased and the related lease terms and conditions, including access and use, shall be determined through the permit process and detailed further during lease negotiations. It is assumed to the greatest extent possible, access to any of the sites will utilize existing roads and egresses. Details of the construction and day-to-day access will be determined in the terms of the subsequent lease negotiated for each site so that the mutual needs of the Town and the Vendor will be met.

At the completion of the project, the entire newly-installed facility (System, associated equipment and/or structures, site improvements, etc.) will be owned by the selected *Vendor* (*System Owner*). The Town will retain ownership of any pre-existing property and any equipment or improvements it provides in order to facilitate the system and its installation. At the termination of the lease (and any subsequent five (5) -year lease extensions), the Town shall have the option of either purchasing the installation or requiring the *Vendor* to remove the installation and restore the site to the conditions pre-existing the installation.

“As-built” plans of the completed project shall be produced by the selected *Vendor* and submitted to the Town in the format and quantity desired by the Town.

Permits:

For each site, the *Vendor* will be required to coordinate with the Project Coordinator(s) and the Town Department Head responsible for that particular site. All site development on the land or facilities and any required easements shall be identified and described. The final designs for the facility shall be engineered by the *Vendor* in cooperation with the Town of Brewster and its Officers and Agents. Current zoning for the System may require filing applications with the Brewster Zoning Board of Appeals and Planning Board as detailed in Section IX below.

The Town has not identified any environmental issues at any of these locations which could adversely impact the viability of solar energy production at any of these locations, however, if environmental concerns or potential impacts are identified during Town review or during the permit process, the Vendor and the Town shall work mutually to address, eliminate or mitigate any potential

negative impacts. It is important to note that installations will be located on and adjacent to land and facilities currently being used and occupied and those designated for future municipal use. Proposed system installations and uses must remain compatible with current and future intended uses. Systems and installations will be visible from other properties and/or abutting open space lands. The design of the system shall demonstrate consideration for any visual impacts of the facility from the abutting properties and open space property. It is assumed that normal visual presence alone does not constitute a negative impact.

III. Definitions:

Bond - Surety bond issued from a bonding company licensed to do business in the Commonwealth of Massachusetts, and listed on the State Treasurer 's list of approved bonding companies.

Conceptual Design - Design describing (text) and showing (drawings and/or photos) azimuth, elevation, and mounting techniques of proposed system, along with location and description of *mounting structures and or components* (both text and drawings).

Contact - Person designated by a *Vendor* to interface with Town of Brewster.

Final Design - Fully engineered design, certified by a licensed engineering firm approved in advance by the Town of Brewster, including, but not limited to:

- mechanical drawings
- description and assessment of methods of structural mounting of *System*, including associated engineering certifications and guarantees to ensure safety and security as well as protection.
- structural assessments, including static load and wind-load assessments
- utility cable routing
- *mounting structures and/or component* details, including overall site plan and elevation drawings/photos from
- perspective drawings and elevations sufficient to see all proposed structures, concrete foundation details, enclosure descriptions (drawings and/or photos),
- Building plans and plot plan showing all existing any proposed structures and/or easements
- Elevation drawings, showing structures with separate drawings showing any perimeter or interior fencing, screening, and/or security devices or details.

Mounting structures and or components – Components securing and connecting PV Panels to the ground or to other structures and/or buildings, enclosures, utility poles, cabinets, cableways, fences and/or other elements related to the facility, which are located on the site or required to connect the *System* to the ground or buildings on the site, and to the electrical grid.

Hazardous Material - Materials as defined in Massachusetts General Law Chapter 21E.

Lease Price Proposal - A sealed bid by the *respondent* as follows:

Vendor Price Proposal: A sealed bid listing a proposed monthly lease fee for the use of the land for the facility, which may contain fixed fees and/or percentages of revenue.

Respondent - A *Vendor* or authorized Agent thereof who replies to this *RFP*.

Response – Any and all proposals and related documents, plans, written descriptions and other submittal media submitted to the Town in reply to this *RFP*.

Site Coordination - The cooperative effort of the *successful respondent* to design and engineer a solution that accommodate the needs and desires of the Town of Brewster as expressed in the Request for Proposals and any further clarification documents .

Successful Respondent(s) - A *Vendor or vendors* who reply to this *RFP* and meet all the requirements as described herein.

System – A solar photovoltaic generation facility providing electrical power for grid-tied operation. This includes, but is not limited to, the following: photovoltaic modules (panels), supporting structure(s), electrical conditioning (inverters, safety devices, combiner panels, etc.), metering and monitoring equipment, interconnection equipment and any other components proposed or required to complete the functionality of the proposed design and installation.

System Owner – The successful *Vendor* who will construct and own the System and related facilities; and maintain the System and related facilities for the term of the Lease(s).

Utility - Electric company or other provider whose service is delivered via pipes, wires or cables.

Vendor – Any party, whether a *Service Provider* or other qualified party capable of designing, constructing and managing a commercial-scale photovoltaic facility who responds to this *RFP*.

IV. Minimum Submission Requirements:

Interested *Vendors* will submit proposals for consideration by the Town. Proposals are to be received by the Town on or before **3:00 p.m. on Monday, December 27, 2010**. Minimum submission requirements of proposals include:

1. Vendor Identification - Name, company name, address and telephone number of *Vendor*.
2. Vendor Contacts - Name, company name, address and telephone number of *contact*, who is authorized to negotiate on behalf of *Vendor*.
3. Vendor Qualifications - - Detailed documentation showing of qualifications. Such documentation shall include information regarding technical, financial, and administrative capability to execute the project that the *Vendor* considers pertinent to the Town's determination of the *Vendor's* competence relating to the project. In addition, the documentation should include evidence of a minimum of 3 successfully completed projects demonstrating the *vendor's* experience with the design, engineering, construction and maintenance of wireless Systems and ground and/or building mounted facilities. *Respondents* will provide

written descriptions and photos or other visual media documentation of comparable facilities that they have constructed with names, titles, and contact information of people benefiting from the construction, either property owners, tenants, or other parties in interest to the facilities. By submitting these names, the *Vendor* grants the Town permission to contact these people to discuss the installation process and the *Vendor's* performance.

4. Descriptive Project Design Proposal - A detailed project proposal pursuant to this Section ("Submission Requirements"), describing, among other information that will assist the Town in its decision, the manner in which the *Vendor* would execute the project, including features, alternative design options, terms and/or conditions, schedule of completion, maintenance and exclusions in the proposed scope. Detailed lists of materials, including without limitation, building specifications, plans and landscaping are required. System specifications, as well as projected production estimates (along with assumptions and basis for estimations) and plans are also required. Vendors are encouraged to include any other information the respondent believes would be helpful in the Town's deliberation of the proposal. Vendors are further encouraged to include optional changes that could be made to the site scheme, structures, or equipment that may result in improvements in any or all of the following: Reduced impact on the community, improved appearance, improved cost or efficiency, improved safety or reliability.

5. Drawings and Visual Representations - Detailed site plans of the proposed facility design and detailed construction schedule showing how the site is proposed to be developed in accordance with the scheme described in the *Vendor's* written project proposal, and the requirements detailed in this Section ("Submission Requirements") Drawings and visual representations must be sufficient to depict overall appearance and construction techniques required to accomplish desired outcomes and effects.

6. Project Management - Detailed monitoring and maintenance proposals and schedules for the duration of the minimum 20-year lease term, during any of the additional five-year lease options exercised, and any post-lease options envisioned.

7. Financial Assurance - Description of proposed ongoing financial assurance sufficient to satisfy the Town in the event of Performance failures and/or decommissioning or removal of the installation is required. Ongoing certification and/or periodic verification of financial assurance shall be required throughout the duration of the project and the continuing lease(s).

8. Price Proposal - A price proposal for the project, including any alternative pricing options that the *Vendor* considers helpful to the Town's ultimate design and completion of the project. The price proposal will consist of a monthly lease fee along with any proposed periodic escalation factors to be paid to the town and/or any projected percentage fees based on revenue generated by the System, or any other creative options for maximizing the Town's revenue and minimizing its cost.

9. Insurance - Certification of insurance and/or bonding sufficient to secure safe and timely construction, completion and management of the project. Successful *Vendor* shall have the ability to provide (at the time of contract execution) an insurance certificate, naming the Town of Brewster as an additional insured, showing evidence of insurance in the minimum amounts shown on **Exhibit D**.

10. Surety Requirements -An indemnification and hold harmless agreement granted to the Town of Brewster against all claims and expenses associated with the installation, operation, maintenance and

dismantling of said facilities, including any claims relating to the interruption of the public safety communications systems resulting from *System Owner* and/or *Service Provider* activities. The Town may require *System Owner*, prior to the start of the construction or at any time during the lease period, to provide a *bond* covering the above.

V. Price Proposals:

Vendors must submit a separate and sealed *price proposal* to the Town of Brewster simultaneously with the submission of a *response*. The *price proposal* is a bid for designing, engineering, constructing and maintaining the facility to the Town's specifications as described in this *RFP* as well as the *proposed percentage of the sublease revenue the Town will receive*. The minimum acceptable *price proposal* will contain a monthly lease fee to be paid to the Town for the use of the land, plus any periodic changes in lease payments based on the revenue obtained by the System.

VI. Comparative Selection Criteria for Descriptive Project Design Proposal:

The ranking of proposals shall be completed by a selection committee made up of Town staff and Persons selected by the Board of Selectmen in accordance with Chapter 30B, the State Uniform Procurement Act, with respect to Requests For Proposals.

1. Experience and Prior Performance - The Town will evaluate each proposal to design, engineer, construct and maintain the facility based on a combination of price, qualifications, proposed features, structures and materials, and other information it deems relevant to its decision. Greatest amount and degree of prior positive experience in constructing, owning and maintaining similar facilities shall be deemed to be most advantageous for this criteria.

2. Proposal Fit & Performance - The Town's selection of a successful *Vendor* will be based on its determination that a particular *Vendor's* proposal best suits the following goals:

The facility will have the optimum capacity for providing electrical services to the residents and businesses of Brewster and generate the greatest revenue for the Town.

A proposal that includes graphics of the System with all of the necessary equipment being placed within the allowed footprint will be deemed more advantageous.

3. Timeliness - The plans are of superior technical quality, clear and concise and will result in a facility that can be constructed in a timely fashion. A proposal that commits to filing for the necessary permits within sixty (60) days from signing a Lease and being fully operational within 290 days after receiving a Building Permit will be deemed more advantageous. A proposal that completes the project by the earliest possible date after signing a Lease shall be considered more advantageous.

4. Aesthetic Compatibility and Visual Context - A proposal that includes graphics illustrating that the System and related equipment are visually and mechanically compatible with the underlying and surrounding space and areas will be deemed more advantageous. Systems proposed to be located within areas of historic or scenic significance (as determined by the Town, in its sole discretion) will be considered less advantageous than systems proposed in areas where the Town determines there are no scenic or historic resources which could be negatively impacted. Systems and installations which

are minimally obtrusive or deemed (at the sole discretion of the Town) to have minimal or insignificant visual impact on abutting and surrounding properties and vistas shall be considered more advantageous.

5. Functional Compatibility - The Town's property values and integrity of the current use(s) of existing land, property, facilities and/or equipment has priority in all cases. Any potential risk or impact posed by any installation to the operation or safety of existing conditions and uses will be considered. The *Vendor* must ensure that all critical Town functions are maintained during the construction period and any potential disruptions will be coordinated in advance with the Town. A proposal which presents minimal risks, interruptions in operations and/or services, or detrimental impacts shall be considered more advantageous.

6. Revenue: A proposal that optimizes the combined revenue for the Town and benefit to its residents and businesses will be deemed more advantageous. Any *Vendor* who has agreements in place to verify value delivery to the residents and businesses of Brewster will be considered more advantageous. Proposals which demonstrate methods to stimulate the local economy will be considered more advantageous.

The Town of Brewster reserves the right to reject, at any time during the selection process, any and all proposals which, in its sole discretion, are determined to not be responsive to the RFP or otherwise not to be in the Town's best interest; the Town also reserves the right to accept a proposal even though it may not be completely responsive.

VII. Permitting:

Pre-Development: The Town wishes to have the new facility in full operation by the Fall of 2011. The Town is prepared to assist the Vendor in filing application(s) for the facility. Special studies may need to be completed in order to determine minimal impact on existing natural habitats, historic or pre-historic resources and view sheds. State applications will need to be submitted in relation to Natural Heritage and Endangered Species (so called an "Appendix A filing")

System Construction: The location(s) proposed for the system(s) will dictate the different permit applications that will need to be submitted. An initial application to the Development Plan Review Committee should solicit the further identification of any locally required permits such as Corridor Overlay Protection District, Water Quality Review, Planning or Zoning Board of Appeals.

VIII. Lease Duration:

The Town is seeking leases for a minimum of twenty (20) years with up to two (2) five (5)- year extensions for a total lease duration of no more than thirty (30) years. Equipment Attachment Provisions are specified in **Exhibit C**.

IX. Use Restrictions:

Use of the site is limited to the solar electric generation services for which the facility is constructed. It is intended to be an un-manned site used only for electrical generation and transfer to the utility grid. Only those activities directly related to the operation and maintenance of the System at the site are permitted. Any addition or modification to the uses that may be desired by the

System Owner in the future will require separate agreement(s) with the Town of Brewster. When the *System Owner* discontinues their use of the facility, whether that is upon termination of the lease and any subsequent lease extensions or earlier, and if the Town of Brewster does not opt to purchase the System, the *System Owner* is responsible for the removal, at its own expense, of the equipment associated with the System. A performance guarantee to ensure this occurs will be required.

XII. Submission of Proposals:

Responses (prepared in quintuplicate) along with the separately sealed *price proposal* must be submitted on or before **3:00 p.m. on Monday, December 27, 2010** to:

Solar System Proposal
Town Administrator's Office
Brewster Town Office Building
2198 Main Street
Brewster, MA 02631

Inquiries should be made to the Selectmen's Office at the above address, by telephone (508) 896-3701, x130 during regular business hours or by electronic mail at jdouglas@town.brewster.ma.us.

Exhibit A: Descriptions of Photovoltaic Project Location(s)

Exhibit B: Topographic Maps of Potential Site and Lease Areas

Exhibit C: Equipment Attachment Provisions

Exhibit D: Minimum Insurance Requirements

Exhibit A: Descriptions of Potential Photovoltaic Project Location(s)

Brewster Water Department Facility –

This facility is located at 165 Commerce Park Drive, off of Freeman's Way. It is identified in the Town's Assessor's records on Map 46 as lot 41. The building has a 6,000 SF metal roof and was constructed in 2009.

Lots 6 & 9, Commerce Park –

These are two (2) vacant industrial zoned lots, totaling 3.3 acres (Lot 6 = 143,307; Lot 9 = 130,690 SF) adjacent to the Water Department Building at 165 Commerce Park. The land is identified in the Town's Assessor's records on Map 46 as lot 41. These lots are currently subject to "green space" vegetative buffer screens from adjacent property lines.

Capped Landfill

The landfill occupies about 16 acres of the 49 acre DPW site. The street access is currently located at 201 Run Hill Road, with an additional easement from Great Fields Road. It is identified in the Town's Assessor's records on Map 35 Lot 1.

DPW Facility Structure

This facility is located at 201 Run Hill Road, with a utility easement from Great Fields Road. It is identified in the Town's Assessor's records on Map 35 Lot 1. The building is a steel frame building with a metal roof and was constructed in 2009. The Building offers about 1,000 square feet of south facing exterior wall space and 13,000 sf of roof area. The transfer station roof is about 2,400 SF in area.

Great Field Road Sand Pit

This facility is located in the north eastern side of Great Fields Road, near the intersection of Great Fields Road with Route 124. It is identified in the Town's Assessor's records on Map 40 as lot 27. The entire parcel is 16.45 acres

Captains Golf Course – Cart Storage Buildings and Maintenance Garage

This facility is located on the Captains Golf Course, 1000 Freeman's Way. The subject buildings are all located on the land identified in the Town's Assessor's records as Map 52 as lot 6.

The Cart storage building is an open walled steel frame structure with a 5,600 SF roof, adjacent to the Club House. The Maintenance Garage is a steel frame building with a roof area of approximately 5,360 SF.

Captains Golf Course – Western Overflow Parking Area

This area comprises a paved parking lot of about 120 cars plus a grassed area of approximately the same size to the west of the event parking at 1000 Freeman's Way. This area is located on the parcel identified in the Town's Assessor's records as Map 52 as lot 6



Town of Brewster,
Massachusetts

Water Department Site
(Photo Prior to Build)



1 inch = 242.453744 feet

260

Feet

Exhibit C: EQUIPMENT ATTACHMENT PROVISIONS

Section 1. Equipment Attachment Rights and Obligations

1.1 **Equipment Attachment Area.** Roof Owner hereby grants to the Equipment Owner the exclusive use of the Equipment Attachment Area and adequate, nominal space in the Building's utility corridor and utility room to install an inverter, a control panel and ancillary equipment necessary to operate the PV Facility. Roof Owner also grants to Equipment Owner a license for reasonable access thereto.

1.2 **As-Is Condition of the Equipment Attachment Area.** Equipment Owner accepts the Equipment Attachment Area in the condition or state which exists as of the Effective Date without any representation or warranty, express or implied in fact or by law, by Roof Owner and without recourse to Roof Owner, as to the nature, condition or usability thereof or the use or uses to which the Equipment Attachment Area or any part thereof may be put.

1.3 **Ownership of the PV Facility.** Except as otherwise provided herein, prior to and during the Term, Roof Owner shall have no ownership interest in the PV Facility. Roof Owner shall keep the PV Facility free from liens arising from their actions.

1.4 **Purposes.** The Equipment Attachment Area shall be used for the sole and exclusive purpose of conducting the Permitted Use.

1.5 **Exclusivity.** Equipment Owner's use of the Equipment Attachment Area shall be exclusive. The use of the Roof by Equipment Owner shall be non-exclusive, and Roof Owner specifically reserves the right to allow the Roof to be used by other parties and to make additions, deletions, or modifications to its own facilities on the Roof, provided that such additions, deletions or modifications do not (i) reduce the amount of Net Energy produced by the PV Facility and/or (ii) impair access to the Equipment Attachment Area.

1.6 **Special Terms and Conditions.** Special terms and conditions, if any, that apply only to Roof Owner's Building and Roof shall be set forth in writing.

Section 2. Installation and Operation of PV Facility

2.1 **General Description.** Except as otherwise specified herein, the PV Facility shall consist solely of the equipment and property described in the lease agreement.

2.2 **Governmental Approval.** Equipment Owner will obtain at its sole cost all Approvals required for Equipment Owner's use of the Equipment Attachment Area, the Permitted Use, and the PV Facility from any and all Governmental Authorities having jurisdiction in the matter. Equipment Owner will promptly inform Roof Owner of all significant developments relating to the issuance of such Approvals. Roof Owner will reasonably cooperate with Equipment Owner in procuring such approvals. If any changes in such plans and/or specifications are required by any Governmental Authority, then Equipment Owner shall submit such changes, if any, to Roof Owner for their approval, which shall not be unreasonably withheld.

2.3 Installation. Equipment Owner shall commence installation of the PV Facility within ninety (90) days of the Effective Date and will proceed diligently and continuously thereafter until completion, but in no event shall installation take more than thirty (30) days. Any damage done to the Roof, Building or other property not belonging to Equipment Owner to the extent arising from installation or operation of the PV Facility shall be repaired at Equipment Owner's expense within five (5) Business Days after notification of damage, or sooner if immediate repair is required to prevent further damage to such property. Equipment Owner will install the PV Facility in accordance with Good Engineering Practice.

2.4 Interconnection with Electric Distribution Grid. Equipment Owner will obtain at its sole cost all Approvals and agreements required for Equipment Owner's interconnection of the PV Facility to the electric distribution grid maintained by NStar Electric, or its successor. Equipment Owner will promptly inform Roof Owner of all significant developments relating to such interconnection matters. Roof Owner will provide Equipment Owner with such information as Equipment Owner may reasonably request in connection with Equipment Owner's procurement of such Approvals and agreements. If any material changes in plans and/or specifications to the PV Facility are required by the applicable electric distribution company, then Equipment Owner shall submit such changes, if any, to Roof Owner for their approval, which shall not be unreasonably withheld.

2.5 Access to and Use of the Equipment Attachment Area. During the Term of this Cooperative PPA, Equipment Owner and its authorized contractors or agents shall have access to the Equipment Attachment Area during the hours set forth in the lease. Roof Owner shall take Commercially Reasonable measures to ensure that Roof access is restricted to authorized persons.

2.6 Plans and Specifications. Equipment Owner's installation of the PV Facility shall be done according to plans approved by Roof Owner, which approval shall not be unreasonably withheld or delayed. Equipment Owner shall provide Roof Owner with as-built plans and specifications of the PV Facility installed on the Equipment Attachment Area which show the actual location of the PV Facility.

2.7 Maintenance Responsibilities. Roof Owner shall maintain the Equipment Attachment Area. Maintenance responsibilities for the PV Facility shall be set forth in the General Terms and Conditions which shall accompany and constitute a portion of the lease agreements.

2.8 Manufacturer's Warranty. Equipment Owner shall ensure that each manufacturer of the principal components of the PV Facility provide it with a minimum fifteen (15) year warranty.

2.9 Interference. Prior to installation, Equipment Owner and Roof Owner shall verify that the installation and operation of the PV Facility will not interfere with or conflict with the use of the Roof, Building or surrounding premises or with the operations of any other party currently using the Roof or Building. Subsequent to installation, Roof Owner shall insure that operation of the PV Facility shall not be interfered with by: (i) any other party using the Roof or Building, or (ii) any other party whose actions are within the control of Roof Owner.

2.10 Alterations. Equipment Owner shall have the right from time to time both before and after the completion of the PV Facility and at Equipment Owner's sole cost and expense to make additions, alterations and changes, structural or otherwise in or to the Equipment Attachment Area as is reasonably required to conduct the Permitted Use in compliance with the Equipment Attachment Provisions, subject, however, in all cases to the following:

(a) No alteration shall be made which would tend to (i) materially change the general design, use, character or structure of the PV Facility, or (ii) increase, reduce or impair, to any material extent, the use of the PV Facility for the generation of electricity, subject to Applicable Legal Requirements (any such alteration, a "Substantial Alteration").

(b) No Substantial Alteration shall be commenced except after prior written notice to and consent from Roof Owner, which consent may be withheld in Roof Owner's reasonable discretion.

(c) Any alteration or Substantial Alteration shall be made with reasonable dispatch and in accordance with Good Engineering Practice.

(d) No later than completion of any alteration or Substantial Alteration, Equipment Owner will provide Roof Owner with complete copies of all final plans and specifications which have not been previously provided.

2.11 Use of Installation and/or Maintenance Subcontractors. Equipment Owner may use qualified subcontractors to install the PV Facility, provided that Equipment Owner shall at all times remain fully responsible for the acts and omissions of such subcontractors. In the performance of its maintenance obligations pursuant to Exhibit B-2 to these General Terms and Conditions, Roof Owner may use qualified subcontractors to maintain the PV Facility, provided that Roof Owner shall at all times remain fully responsible for the acts and omissions of such subcontractors. The use of subcontractors as set forth in the two preceding sentences shall not require the consent of other Parties. Installation and maintenance subcontractors shall be required to meet the insurance requirements set forth in Exhibit B-3 to these General Terms and Conditions, provided, however, that satisfaction of such requirements shall not relieve Equipment Owner of its responsibilities for such subcontractors as set for in this Section 2.11. Background checks shall be conducted on all persons having access to the Building or Roof to ensure compliance with M.G.L. c. 71, §38R. Roof Owner may require Equipment Owner to remove such subcontractors as Roof Owner, in its reasonable discretion, deems objectionable or contrary to the best interests of the Roof Owner.

2.12 Roof Owner's Building Maintenance. Roof Owner may need to temporarily remove or relocate the PV Facility in order to perform routine or necessary Building maintenance, including, but not limited to, repair or replacement of the Roof, provided, that unless such maintenance is necessitated as a result of installation or operation of the PV Facility, (i) Roof Owner pays any and all costs incurred in the relocation of the PV Facility to and from the temporary location; (ii) any such relocation shall be performed by contractors approved by Equipment Owner, such approval not to be unreasonably withheld; (iii) Equipment Owner consents to the temporary relocation of the PV Facility, such consent not to be unreasonably withheld; (iv) Roof Owner provides Equipment Owner with at least thirty (30) days prior written notice of its intent to temporarily relocate; (iv) the first temporary relocation shall not be for more than thirty (30) days; and (v) in the event that a temporary relocation is for longer than thirty (30) days or if there has already been at least one relocation during the Term, Roof Owner shall promptly pay Equipment Owner for any lost revenue during the relocation, which lost revenue shall be calculated based on the average output of the PV Facility for the preceding year, or the average capacity factor of the PV Facility if the PV Facility has not been in operation for at least one year, multiplied by the number of days (up to one hundred and twenty [120]) the PV Facility is out of operation due to the relocation, times the installed capacity, and shall be billed monthly by Equipment Owner until the PV Facility is relocated back to the Equipment Attachment Area. Equipment Owner agrees such temporary removal or relocation shall not be an event of default or grounds for termination of these Agreements.

2.13 Monitoring System. The PV Facility will include the Fat Spaniel monitoring system, or a substantially equivalent monitoring system. Equipment Owner will provide Roof Owner access to the PV Facility's monitoring and reporting system that is reasonable and necessary for Roof Owner to monitor (but not control) the operation of the PV Facility.

2.14 Permanent Relocation of PV Facility. Roof Owner reserves the right to permanently relocate the PV Facility to another suitable location on the Roof or Building at any time for any Commercially Reasonable purpose. Relocation costs shall be borne by Roof Owner. Any such relocation shall be performed by contractors approved by Equipment Owner, such approval not to be unreasonably withheld. If the location proposed by Roof Owner is not acceptable to Equipment Owner, Equipment Owner in good faith and its sole reasonable discretion may terminate this Cooperative PPA and remove the PV Facility in accordance with Good Engineering Practice. In such event, Roof Owner shall reimburse Equipment Owner for Commercially Reasonable removal costs.

2.15 Emergencies. The Parties agree that Roof Owner shall have the right to respond to any emergency or equipment failure involving the PV Facility if necessary to protect the Building or to protect public health or safety, and to effectuate any necessary repairs or take corrective action.

2.16 Credits. Except as set forth in the REC Agreement(s), the Parties agree that any state or federal tax credits, state or federal rebate incentives or any other similar credits or financial incentives associated with the installation or ownership of the PV Facility shall inure to and be for the benefit of Equipment Owner.

2.17 Liability for PV Site Selection. Equipment Owner shall be responsible for all liabilities and damages (except as provided expressly herein) incurred by Roof Owner to the extent arising solely from the faulty installation or siting of the PV Facility, as determined, in accordance with Good Engineering Practice, at the time of the installation of such PV Facility and based on: (i) the known condition of the Roof at the time of installation and (ii) taking into account other existing structures on the Roof at the time of the PV Facility installation.

Section 3. Termination of the Equipment Attachment Provisions

Termination of the Equipment Attachment Provisions shall result in result in automatic termination of this entire Agreement. The termination provisions set forth in Article VI shall govern the Parties' termination rights and obligations.

INSURANCE REQUIREMENTS

	<u>LIMITS</u>
WORKMEN'S COMPENSATION	Per Statute
EMPLOYER'S LIABILITY INSURANCE	\$1,000,000
COMPREHENSIVE GENERAL LIABILITY	
Personal Injury	All \$500,000 each occurrence
Bodily Injury	\$2,000,000 in the aggregate
Property Damage	\$1,000,000 in the aggregate
COMPREHENSIVE AUTOMOBILE LIABILITY	
Bodily Injury	\$500,000 each person \$1,000,000 each accident
PROPERTY DAMAGE	\$500,000 per accident
PLUS COMPREHENSIVE LIABILITY	\$1,000,000 in the aggregate
UMBRELLA COVERAGE	I \$2,000,000
PROFESSIONAL LIABILITY	\$1,000,000

Sample Contract Documents

M.G.L. c.30B Lease Agreement

**LEASE
BETWEEN
THE TOWN OF BREWSTER
AND
BREWSTER COMMUNITY SOLAR GARDEN, LLC**

This Lease (the "Agreement") is entered into on this ____ day of September, 2011 (the "Effective Date") and is by and between the Town of Brewster, a Massachusetts municipal corporation with a mailing address of 2198 Main Street, Brewster, Massachusetts 02631 (the "Town") and Brewster Community Solar Garden, LLC a Limited Liability Company with a mailing address of 326 Yankee Drive, Brewster, Massachusetts 02631 (the "Successful Proposer").

RECITALS

- A. In November 2010, the Town issued a Request for Proposals for the Lease of Municipal Property and Development of Photovoltaic Energy Production System(s) (the "RFP"). A copy of the RFP is attached hereto and incorporated herein as Exhibit A.
- B. Pursuant to the RFP, the Town was seeking qualified vendors to design, engineer, construct, own and maintain new PV Systems upon Town owned land and buildings. The purpose of the proposed PV System was: to support the local electrical supply; render municipal properties more productive; generate electricity from renewable and clean resources; and, produce lease revenue to the Town.
- C. The Successful Proposer submitted a Proposal on December 27, 2010, a copy of which is attached hereto and incorporated herein as Exhibit A-1. In its Proposal, the Successful Proposer proposed to install ground mounted, grid-interconnected, photovoltaic arrays at a number of Town owned properties.
- D. The Town accepted the Successful Proposer's Proposal with respect to the property known as Commerce Park Lots 6 and 18.

NOW THEREFORE, for consideration paid, the receipt and sufficiency of which are hereby acknowledged, the Parties to this Agreement hereby agree as follows:

ARTICLE I - A: Exhibits

This Agreement is supplemented by the following Exhibits, each of which is part of this Agreement and incorporated herein. In the event of any conflict between this Lease and the provisions of any Exhibit, the terms of this Lease shall control.

Exhibit A – Town of Brewster Request for Proposals

Exhibit A-1 – My Generation Energy, Inc. Response to RFP

Exhibit B – Description of the Premises

Exhibit B-1 – Plan of the Premises prepared by Bennett & Associates

Exhibit C – PV System Assets

Exhibit D – Insurance Requirements

Exhibit E – Agreements Affecting the Premises

Exhibit F – Projected Rent (Prior to Pre-Development Cost Sharing in Years 1-5)

Exhibit G – Form of Memorandum of Lease

ARTICLE I - B: DEFINITIONS

When used in this Agreement, the following terms shall have the meanings given, unless a different meaning is expressed or clearly indicated by the context. Words defined in this Article I which are capitalized shall be given their common and ordinary meanings when they appear without capitalization in the text. Words not defined herein shall be given their common and ordinary meanings.

“Affiliate” means, with respect to any Person, such Person’s general partner or manager, or any other Person that, directly or indirectly, through one or more intermediaries, controls, or is controlled by, or is under common control with, such Person.

“Applicable Legal Requirements” means any present and future law, act, rule, requirement, order, bylaw, ordinance, regulation, judgment, decree, or injunction of or by any Governmental Authority, ordinary or extraordinary, foreseen or unforeseen, and all licenses, permits, tariffs, and other governmental consents, which may at any time be applicable to a Party’s rights and obligations hereunder, including, without limitation, the design, procurement, construction, installation, operation, ownership, maintenance, repair, decommissioning and removal of the PV System on the Premises, as well as the selling and purchasing of power therefrom.

“Bankrupt” means that a Party or other entity (as applicable): (i) is dissolved (other than pursuant to a consolidation, amalgamation or merger); (ii) becomes insolvent or is unable to pay its debts or fails (or admits in writing its inability) generally to pay its debts as they become due; (iii) makes a general assignment, arrangement or composition with or for the benefit of its creditors; (iv) has instituted against it a proceeding seeking a judgment of insolvency or bankruptcy or any other relief under any bankruptcy or insolvency law or other similar law affecting creditor’s rights, or a petition is presented for its winding-up, reorganization or liquidation, which proceeding or petition is not dismissed, stayed or vacated within twenty (20) Business Days thereafter; (v) commences a voluntary proceeding seeking a judgment of insolvency or bankruptcy or any other relief under any bankruptcy or insolvency law or other similar law affecting creditors’ rights; (vi) seeks or consents to the appointment of an administrator, provisional liquidator, conservator, receiver, trustee, custodian or other similar official for it or for all or substantially all of its assets; (vii) has a secured party take possession of all or substantially all of its assets, or has a distress, execution, attachment, sequestration or other legal process levied, enforced or sued on or against all or substantially all of its assets; (viii) causes or is subject to any event with respect to it which, under the applicable laws of any jurisdiction, has an analogous effect to any of the events specified in clauses (i) to (vii) inclusive; or (ix) takes any action in furtherance of, or indicating its consent to, approval of, or acquiescence in, any of the foregoing acts.

“Business Day” means a day on which Federal Reserve member banks in Boston are open for business; and a Business Day shall open at 8:00 a.m. and close at 5:00 p.m. Eastern Prevailing Time.

“Commercial Operation” means that the PV System is ready for regular, daily operation, has been accepted by the Successful Proposer (and to the extent required, the Distribution Company), is in compliance with material Applicable Legal Requirements in all respects, and is capable of producing electrical energy and delivering it to the Point of Delivery.

"Commercially Reasonable" means any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known, or which in the exercise of due diligence, should have been known, at the time the decision was made, would have been expected in the industry to accomplish the desired result consistent with reliability, safety, expedition, project economics and regulations.

"Distribution Company" means NStar Electric Company or any successor thereto.

"Effective Date" means the date set forth in the introductory paragraph of this Agreement.

"Energy" means the amount of electricity either used or generated over a period of time; expressed in terms of kilowatt hour ("kWh") or megawatt hour ("MWh").

"Event of Default" means any event of default as defined in Sections 8.2 and 8.3 of this Agreement.

"Event of Termination" means any event of termination as defined in Section 8.1 of this Agreement.

"Financier" means any individual or entity providing money or extending credit for the PV System to Successful Proposer for: (1) the construction, term or permanent financing of the PV System; or (2) working capital or other ordinary business requirements for the PV System.

"Financier" shall not include common trade creditors of Successful Proposer.

"Force Majeure" means any cause not within the reasonable control of the affected Party which precludes that Party from carrying out, in whole or in part, its obligations under this Agreement, including, but not limited to, Acts of God; winds; hurricanes; tornadoes; fires; epidemics; landslides; earthquakes; floods; other natural catastrophes; strikes; lock-outs or other industrial disturbances; acts of public enemies; acts, failures to act or orders of any kind of any Governmental Authority acting in its regulatory or judicial capacity; insurrections; military action; war, whether or not it is declared; sabotage; riots; civil disturbances or explosions. Nothing in this provision is intended to excuse either Party from performing due to any governmental act, failure to act, or order, where it was reasonably within such Party's power to prevent such act, failure to act, or order. Notwithstanding anything in this Agreement to the contrary, *Force Majeure* shall not mean:

- (a) Unavailability of sun.

- (b) Unavailability of equipment, repairs or spare parts for the PV System, except to the extent due to a qualifying event of *Force Majeure*.
- (c) Inability to obtain, maintain or renew any Permit or any delay in obtaining, maintaining, or renewing any Permit, except that Successful Proposer shall be able to assert Town's governmental actions on Permits for the PV System as an event of *Force Majeure*.
- (d) Any nonpayment under this Agreement or any third party agreement.
- (e) Economic hardship of either Party.

"Good Engineering Practice" means any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known, or which in the exercise of due diligence, should have been known, at the time the decision was made, would have been expected to accomplish the desired result consistent with reliability, safety, expedition, project economics and Applicable Legal Requirements for similar facilities in the Commonwealth of Massachusetts. Good Engineering Practice is not intended to be limited to consideration of any one practice, method or act, to the exclusion of all others, but rather, is intended to require the consideration of a spectrum of possible practices, methods or acts.

"Governmental Authority" means the United States of America, the Commonwealth of Massachusetts, and any political or municipal subdivision thereof, and any agency, department, commission, board, bureau, independent electric system operator, or instrumentality of any of them, or any court or tribunal, including, without limitation, Town.

"Installation Period" has the meaning set forth in Section 5.4.

"Interest Rate" means a fluctuating interest rate per annum equal to the sum of (1) the Prime Rate as stated in the "Bonds, Rates & Yields" section of The Wall Street Journal on the Effective Date and thereafter on the first day of every calendar month, plus (2) two percentage points. (In the event that such rate is no longer published in The Wall Street Journal or such publication is no longer published, the Interest Rate shall be set using a comparable index or interest rate selected by Town and reasonably acceptable to Successful Proposer.) The Interest Rate hereunder shall change on the first day of every calendar month. Interest shall be calculated daily on the basis of a year of 365 days and the actual number of days for which such interest is due.

"Leasehold Mortgage" has the meaning set forth in Section 11.4.

"Parties" means Town and Successful Proposer collectively, and their respective successors and permitted assignees.

"Party" means Town or Successful Proposer individually, and their respective successors and permitted assignees.

"Permits" means all state, federal, county, and local authorizations, certificates, permits, licenses and approvals required by any Governmental Authority for the construction, operation and maintenance of the PV System.

"Permitted Use" means the use, occupation, and enjoyment of the Premises by Successful Proposer to design, procure, install, test, commission, own, operate, maintain, expand and remove the PV System, all of which are designed and intended for the purpose of producing solar-generated electricity.

"Person" means an individual, partnership, corporation (including a business trust), limited liability company, joint stock company, trusts, unincorporated association, joint venture, Governmental Authority, or other entity.

"Premises" means the site for PV System owned by Town which is identified in Exhibits B and B-1 to this Agreement.

"Property" means both real and personal property.

"PV System" means the solar electric generating facility, including, but not limited to, the PV System assets, as further identified in Exhibit C attached hereto.

"Real Property Rights" has the meaning set forth in Section 2.1.

"Substantial Alteration" has the meaning set forth in Section 5.10.

"Term" has the meaning set forth in Section 3.1.

"Termination Date" means the earlier to occur of: (1) the last day of the Term; or (2) the date of termination.

ARTICLE II: LEASE OF PREMISES

2.1 **Leased Premises.** Town hereby leases to Successful Proposer the possession, use, enjoyment, and control of the Premises (as described in Exhibits B and B-1) for the sole and exclusive purpose of conducting the Permitted Use, as set forth below, subject to the Town's reserved uses as set forth in Article X (Quiet Enjoyment). Town also grants to Successful Proposer a license to construct electric interconnection lines to connect the PV System to the local electric distribution system operated by the Distribution Company. Town hereby further agrees and acknowledges that Successful Proposer shall have the right, without any notice to or consent of Town:

(a) for the PV System to include a total nameplate capacity of up to 350kW-DC/310kW-AC;

2.2 The Premises are demised subject to the following:

- (a) any encumbrances shown on the plan of the Premises set forth in Exhibit B-1;
- (b) covenants, restrictions, easements, agreements, and reservations, as set forth in Exhibit B-1;
- (c) present and future zoning laws, ordinances, resolutions, and regulations of the municipality in which the land lies, and all present and future ordinances, laws, regulations, and orders of all boards, bureaus, commissions, and bodies of any municipal, county, state, or federal authority, now or hereafter having jurisdiction, so long as they permit or otherwise regulate the use of the Premises for the Permitted Use;
- (d) the condition and state of repair of the Premises as the same may be on the Effective Date;
- (e) all water charges, electric charges, and sewer rents, accrued or unaccrued, fixed or not fixed, from and after the Effective Date arising as a result of the construction and operation of the PV System or any appurtenant facilities or improvements associated with the Permitted Use;
- (f) full compliance by the Successful Proposer of all Applicable Legal Requirements;

(g) Town's reserved uses, as provided in Article X (Quiet Enjoyment); and

2.3 As-Is Condition of the Premises. Successful Proposer accepts the Premises in the condition or state in which the Premises now are without any representation or warranty, express or implied in fact or by law, by Town and without recourse to Town, except as otherwise provided herein, as to the use or uses to which the Premises or any part thereof may be put.

2.4 Ownership of the PV System. Except as otherwise provided herein, prior to and during the Term, Town shall have no ownership interest in the PV System.

2.5 Net Lease. Except as expressly set forth herein, and subject to the provisions of section 10.1 contained herein, the Parties acknowledge and agree that Town shall not be required prior to or during the Term to make any expenditure, incur any obligation, or incur any liability of any kind whatsoever in connection with this Agreement or the ownership, installation, operation, maintenance, repair or reconstruction of the PV System.

2.6 Purposes. The Premises shall be used for the sole and exclusive purpose of conducting the Permitted Use. Except with the prior express written consent of Town, Successful Proposer shall not use the Premises for any use other than the Permitted Use.

2.7 Subordination. Successful Proposer acknowledges and understands that this Agreement and all rights of Successful Proposer are subject and subordinate to all existing leases, easements, rights of way, declarations, restrictions, permits, or other matters of record and all existing agreements of the Town referenced in Exhibit E.

ARTICLE III: TERM

3.1 Term. The term of this Agreement (the "Term") commences on the Effective Date of this Agreement and ends at the earlier of 11:59 PM on the day preceding the twentieth (20th) anniversary of the Effective Date (the "Termination Date") or such date as this Agreement may be earlier terminated pursuant to the provisions of this Agreement. The Term may be extended by the Successful Proposer in conformance with all Applicable Legal Requirements for two, successive five (5) year periods. A Party seeking to extend the Term of this Agreement shall send written notice of such intent to the other Party no later than two (2) months prior to the Termination Date.

ARTICLE IV: RENT

4.1 **Rent.** Successful Proposer shall pay to Town an annual rental payment, in advance, on or before the fifteenth (15th) day of each January during the Term, commencing January 15, 2013. Rent for the first year of the Term shall be in the amount of Eleven Thousand Five Hundred Dollars (\$11,500), pro-rated based on a year of 365 days and the number of days elapsed from the date on which the PV System achieves Commercial Operation (the "Commercial Operation Date") through and including December 31, 2012, and shall be payable within 30 days of the Commercial Operation Date. The Rent payable for each subsequent year of the Term shall be as set forth on the Schedule of Rent Payments attached hereto as Exhibit F and incorporated herein by this reference thereto. If Successful Proposer shall fail to pay Town any sum required to be paid by Successful Proposer to Town within ten (10) Business Days after such payment is due, interest on the unpaid amount shall accrue at the Interest Rate from and including the date such payment is due but excluding the date the payment is received.

4.2 **Site Preparation.** Successful Proposer shall be responsible for preparation of the site and all costs related thereto, provided that the Town shall reimburse Successful Proposer for one-half of such costs up to a maximum amount of \$12,500 in the form of a credit against Rent due under this Lease. The credit will be applied in equal parts to the first five annual installments of Rent due hereunder. Successful Proposer shall provide the Town with copies of all invoices for site preparation work.

ARTICLE V: INSTALLATION AND OPERATION OF PV SYSTEM

5.1 **General Description.** Except as otherwise specified herein, the PV System shall consist solely of the equipment and property described in Exhibit C.

5.2 **Use of Installation and/or Maintenance contractors.** Successful Proposer may use qualified contractors to install and/or maintain the PV System, provided that Successful Proposer shall at all times remain fully responsible for the acts and omissions of such contractors.

5.3 **Governmental Permits.** Successful Proposer shall obtain at its sole cost all Permits required for Successful Proposer's use of the Premises, the Permitted Use, and the PV System from any and all Governmental Authorities having jurisdiction in the matter. Town shall reasonably cooperate with Successful Proposer in procuring such Permits.

5.4 **Installation.** Successful Proposer shall commence development of the PV System within ten (10) months of the Effective Date and will proceed diligently and continuously thereafter

until completion, but in no event shall the installation take more than twelve (12) months (the "Installation Period"). Successful Proposer will install the PV System in accordance with Good Engineering Practice and all Applicable Legal Requirements.

5.5 Interconnection with Electric Distribution Grid. Successful Proposer shall obtain at its sole cost all Permits and agreements required for Successful Proposer's interconnection of the PV System to the electric distribution grid maintained by the Distribution Company.

5.8 Maintenance Responsibilities. Successful Proposer shall properly maintain the PV System, conduct all required maintenance, and make all repairs thereto in accordance with Good Engineering Practice. . Successful Proposer shall be responsible for all costs related to the PV System, including, but not limited to, those costs necessary to construct, operate, maintain, repair, and remove the PV System.

5.9 Intentionally Omitted

5.10 Alterations. Successful Proposer shall have the right from time to time both before and after the completion of the PV System and at Successful Proposer's sole cost and expense to make additions, alterations and changes, structural or otherwise in or to the Premises as is reasonably required to conduct the Permitted Use in compliance with the provisions of this Agreement.

5.11 Town Cooperation. Town shall have the following duties under this Agreement:

(a) to act expeditiously, cooperatively and in good faith in facilitating any Permits necessary for the construction and operation of the PV System; and,

(b) to cooperate with Successful Proposer and its contractors to the extent reasonable and appropriate on issues regarding access, construction, on-site electrical metering and consumption, and interconnection.

5.12 Emergencies. The Parties agree that Town shall have the right, but not the obligation, to respond to any emergency or equipment failure involving the PV System if necessary to protect the Premises or to protect public health or safety.

5.13 Damage. Any damage caused by the Successful Proposer or by Agents of the Successful Proposer to the Premises or other property not belonging to Successful Proposer during installation or during operations shall be repaired at Successful Proposer's expense as soon as

practicable, but no later than forty-five (45) Business Days after notification of damage, or sooner if immediate repair is required to prevent further damage to such property.

ARTICLE VI: SUCCESSFUL PROPOSER'S REPRESENTATIONS, WARRANTIES, AND ADDITIONAL COVENANTS

6.1 **Successful Proposer's Representations and Warranties.** As of the Effective Date of this Agreement, Successful Proposer represents and warrants to Town as follows:

- (a) Successful Proposer has full legal capacity to enter into this Agreement;
- (b) The execution of this Agreement has been duly authorized, and each person executing this Agreement on behalf of Successful Proposer has full authority to do so and to fully bind Successful Proposer;
- (c) Successful Proposer knows of no pending or threatened action, suit, proceeding, inquiry, or investigation before or by any judicial court or administrative or law enforcement agency against or affecting Successful Proposer or its properties wherein any unfavorable decision, ruling, or finding would materially and adversely affect the validity or enforceability of this Agreement or Successful Proposer's ability to carry out its obligations under this Agreement; and
- (d) None of the documents or other written or other information furnished by or on behalf of Successful Proposer to Town or its agents pursuant to this Agreement contains any untrue statement of a material fact or omits to state any material fact required to be stated therein or necessary to make the statements contained herein or therein, in the light of the circumstances in which they were made, not misleading.

6.2 **Successful Proposer's Covenants.** In addition to the other covenants set forth in this Agreement, Successful Proposer covenants to Town as follows:

- (a) Successful Proposer shall promptly inform Town of the occurrence of any event that may reasonably be expected to materially affect the operation of the PV System or the performance of Successful Proposer's obligations under this Agreement (including, but not limited to, any notices of default under any third party contract and the occurrence of any event that may result in the imposition of material liability or obligations on Successful Proposer or Town); and

ARTICLE VII: TOWN'S REPRESENTATIONS, WARRANTIES AND ADDITIONAL COVENANTS

7.1 **Town's Representations and Warranties.** As of the Effective Date of this Agreement, Town represents and warrants the following to Successful Proposer:

- (a) Town has full legal capacity to enter into this Agreement;
- (b) The execution of this Agreement has been duly authorized, and each person executing this Agreement on behalf of Town has full authority to do so and to fully bind Town;
- (c) Town knows of no pending or threatened action, suit, proceeding, inquiry, or investigation before or by any judicial court or administrative or law enforcement agency against or affecting Town or its properties wherein any unfavorable decision, ruling, or finding would materially and adversely affect the validity or enforceability of this Agreement or Town's ability to carry out its obligations under this Agreement;
- (d) On the Effective Date, no third party shall have any tenancy or license to use all or any portion of the Premises during the Term, except as provided for in Section 10.2;
- (e) Town warrants that it owns the Premises in fee simple, and the Premises are free and clear of all liens, encumbrances and restrictions, except that existing tenants and leaseholders as listed in Exhibit E have been granted leases for certain uses within the area known as "Commerce Park" and those lease holders are also granted access over and use of Commerce Park Way.

7.2 **Town's Covenants.** In addition to the other covenants set forth in this Agreement, Town covenants to Successful Proposer that throughout the Term and any extensions thereof, Town shall not interfere or allow a third party to interfere with the PV System's exposure to sunlight which would normally and naturally reach the PV System.

ARTICLE VIII: TERMINATION; DEFAULT; REMEDIES

8.1 **Termination.** Notwithstanding the provisions of Section 8.4 (*Force Majeure*), this Agreement shall not be subject to termination, except for the following Events of Termination:

- (a) Either Party may terminate this Agreement in the event a material Event of Default pursuant to Section 8.2 (Events of Default by Town) or 8.3 (Events of Default by

Successful Proposer) prevents operation of the PV System for twelve (12) months, except with respect to *Force Majeure* events.

(b) Successful Proposer shall terminate this Agreement in the event that Successful Proposer abandons the PV System prior to Commercial Operation.

8.2 Events of Default by Town. The following shall each constitute an Event of Default by Town:

(a) (a) Town breaches any material obligation under this Agreement, and fails to cure, despite good faith effort to cure such breach within one hundred eighty (180) Business Days after notification by Successful Proposer of the breach.

(b) If any material representation or warranty made by Town in Article VII of this Agreement (Town's Representations, Warranties, and Additional Covenants) proves to have been misleading or false in any material respect when made and to have a material adverse affect on the Successful Proposer, and Town does not cure the underlying facts so as to make such representation or warranty correct and not misleading within ten (10) Business Days of written notice from Successful Proposer.

(c) Any other material breach of this Agreement, which proves to have a material adverse affect on the Successful Proposer, not specifically enumerated above.

Events of Default in this Section 8.2 are subject to specific performance and monetary damages pursuant to Section 8.5 (Remedies).

8.3 Events of Default by Successful Proposer. The following shall each constitute an Event of Default by Successful Proposer:

(a) Successful Proposer breaches any material obligation under this Agreement, and fails to Cure such breach within one hundred eighty (180) Business Days after notification by Town of the breach.

(b) If any material representation or warranty made by Successful Proposer in Article VI of This Agreement (Successful Proposer's Representations, Warranties, and Additional Covenants) proves to have been misleading or false in any material respect when made and to have a material adverse affect on the Town, and Successful Proposer does not

cure the underlying facts so as to make such representation or warranty correct and not misleading within ten (10) Business Days of written notice from Town.

(c) Any other material breach of this Agreement, which proves to have a material adverse affect on the Town, not specifically enumerated above.

Events of Default in this Section 8.3 are subject to specific performance and monetary damages pursuant to Section 8.5 (Remedies).

8.4 Force Majeure. Notwithstanding Sections 8.1 (Termination), 8.2 (Events of Default by Town) and 8.3 (Events of Default by Successful Proposer), if by reason of *Force Majeure* either Party is unable to carry out, either in whole or in part, its obligations herein contained, such Party shall not be deemed to be in default during the continuation of such inability, provided that: (a) the non-performing Party, as soon as practicable (and in any event within five (5) Business Days after the *Force Majeure* event first prevents performance), gives the other Party hereto written notice describing the particulars of the occurrence; (b) the suspension of performance be of no greater scope and of no longer duration than is required by the *Force Majeure* event; (c) no obligations of the Party which were to be performed prior to the occurrence causing the suspension of performance shall be excused as a result of the occurrence; and (d) the non-performing Party shall use Commercially Reasonable efforts to remedy with all reasonable dispatch the cause or causes preventing it from carrying out its obligations. If an event of *Force Majeure* continues for a period of one hundred eighty (180) days or longer, either Party may treat such an event as an Event of Termination and may immediately terminate this Agreement by sending the non-performing Party a written termination notice setting forth the Termination Date, provided, however, that the other Party may not terminate this Agreement if the non-performing Party is using Commercially Reasonable efforts to cure the Event of Termination and the non-performing Party provides reasonable written assurances that it will be able to cure such Event of Termination within an additional one hundred eighty (180) days. In the event of termination under this Section 8.4, Financier shall have step-in rights as provided in Section 8.6.

8.5 Remedies.

(a) In the event the defaulting Party fails to cure the Event of Default within the period for curative action under Sections 8.2 (Events of Default by Town) or 8.3 (Events of Default by Successful Proposer), as applicable, the non-defaulting Party may seek specific performance and/or monetary damages pursuant to this Section 8.5.

NO PARTY HERETO SHALL BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, PUNITIVE, EXEMPLARY OR INDIRECT DAMAGES, LOST PROFITS OR OTHER BUSINESS INTERRUPTION DAMAGES, BY STATUTE, IN TORT OR CONTRACT.

8.6 Step-in Rights of Financier.

(a) Town agrees to give written notice to any Financier of which Town has written notice upon the occurrence of any Event of Default hereunder, and Financier shall have a period of sixty (60) days after receipt of said notice to cure such default, provided however, that Financier shall have an additional reasonable period of time thereafter, not to exceed one hundred eighty (180) days, to cure the Event of Default if Financier uses Commercially Reasonable efforts to cure such Event of Termination during the initial sixty (60) days after notice aforesaid, and Financier provides reasonable written assurances that it will be able to cure such Event of Default within such a reasonable period of time thereafter.

(b) Town agrees that, prior to termination pursuant to Section 8.1 (Termination), Town shall give written notice to any Financier of which Town has written notice upon the occurrence of any Event of Termination hereunder, and Financier shall have a period of one hundred eighty (180) days after receipt of said notice to cure such Event of Termination, provided however, that Financier shall have an additional one hundred eighty (180) days to cure the Event of Termination if Financier uses Commercially Reasonable efforts to cure such Event of Termination during the initial one hundred eighty (180) days after notice aforesaid, and Financier provides reasonable written assurances that it will be able to cure such Event of Termination within the additional one hundred eighty (180) days.

8.7 Damage or Destruction of PV System.

(a) Successful Proposer shall bear the risk of loss to the PV System (including casualty, condemnation or *Force Majeure*), except to the extent such loss results from the gross negligence or willful misconduct of the Town or Town's agents, representative, customers, vendors, visitors, employees, contractors, or invitees.

(b) In the event of any PV System loss, Successful Proposer shall, at its sole cost and expense either (i) repair or replace the PV System, or (ii) elect to terminate this Agreement in which case Successful Proposer shall remove the PV System and promptly restore the Premises to substantially the same condition as existed prior to the Effective Date in accordance with Section 8.8 (Site Restoration).

8.8 Site Restoration. On the Termination Date, Successful Proposer shall peaceably and quietly leave, surrender and yield up unto Town the Leased Premises. Following the Termination Date of this Agreement, Successful Proposer shall have one hundred eighty (180) days to remove the PV System from the Leased Premises, and to restore the Leased Premises to the condition that existed as of the Effective Date.

8.9 Abandonment of PV System. Notwithstanding anything to the contrary contained in this Agreement, any waiver in whole or in part of the requirement to remove the PV System shall require the written approval of Town. Any of the PV System left on the Leased Premises after the passage of one hundred eighty days (180) days after the Termination Date shall be deemed abandoned. Town shall provide written notice to the Successful Proposer within thirty (30) days of the expiration of such one hundred eighty (180) day period, of its election to retain all or any of the PV System as its property, or dispose of all or any of the PV System in such reasonable manner as Town may see fit and at Successful Proposer's sole cost; provided, however, that Town's election to retain all or any portion of the PV System as its property shall relieve Successful Proposer from any liability for its failure to remove such PV System; and provided further, however, that the foregoing shall not apply to any of the PV System that is not timely removed if the failure to remove is caused by an event of Force Majeure or the negligent acts or omissions of Town (in which in either case the time period for removal shall be extended on a day for day basis).

ARTICLE IX: INSURANCE

The Parties agree to comply with the insurance obligations allocated to them in Exhibit D hereto.

ARTICLE X: QUIET ENJOYMENT

10.1 Quiet Enjoyment. Town covenants that Successful Proposer shall quietly have and enjoy the Premises throughout the Term and any extensions thereof. Town warrants and agrees that, throughout the Term and any extensions thereof:

(a) the Premises shall be dedicated to Successful Proposer's use for conducting the Permitted Use and designing, constructing, operating, maintaining, repairing, and expanding the PV System, except as provided for in Section 10.2;

(b) Town shall protect Successful Proposer's quiet enjoyment of its rights hereunder,

In the event of an emergency, Town shall have the right to enter upon the Premises for the purposes of preventing damage or harm to property or people. The Town shall, when possible and feasible, make attempt to provide the Successful Proposer as much notice as possible, prior to entering the Premises. Such access to the Premises shall not be considered a breach of the covenant of quiet enjoyment.

10.2 Town's Reserved Uses. Except as specifically set forth below, Town shall not itself conduct any other use, nor shall Town allow any third party to conduct any other use, on the Premises. The only exceptions to the foregoing are:

(a) The Town retains the right to enter or access the property and to use the Premises if doing so is required in order for the Town to complete tasks necessary to protect the environment

(b) The Town retains the right to maintain drainage swales and other storm water retention and diversion features required to prevent flooding or erosion or to maintain animal habitats.

ARTICLE XI: ASSIGNMENT AND MORTGAGE

11.1 Assignment.

(a) Successful Proposer Assignment. Except as otherwise provided by this Agreement, Successful Proposer shall not assign, subcontract, sublet or delegate its rights, privileges or obligations under this Agreement without the prior written approval of Town, provided that prior notice to or consent of Town shall not be required for a collateral assignment by Successful Proposer to any Financier, subject to the terms and conditions of this Article XI. For assignments requiring Town's approval, approval may be denied in the reasonable discretion of Town if it determines that the proposed assignee does not have at least the same financial and technical ability as the assigning Successful Proposer. Notwithstanding the foregoing, Town may not unreasonably withhold its consent to an assignment to an affiliated entity under common control or management with Successful Proposer. Successful Proposer's assignee shall agree in writing to be bound by the terms and conditions of this Agreement.

(b) Town Assignment. Town shall have the right to assign its right to payment of Rent under this Agreement, but Town shall not delegate its duties hereunder. Nothing herein

contained shall limit the right of the Town to sell or transfer title to the Premises, provided that any such transferee takes title subject to this Lease.

To the greatest extent possible, the rights and obligations created by this Agreement shall inure to the benefit of, and be binding upon, the successors and permitted assigns of the respective Parties hereto. Notice of any permitted assignment shall be provided to the other Party as soon as practicable.

11.2 Financing by Leasehold Mortgage. Town is cognizant of the need of Successful Proposer to finance its interest in the Premises and the PV System thereon, and therefore specifically agrees, subject to Section 8.6, without any further request for prior consent to permit Successful Proposer to mortgage, assign or transfer its interest in the Premises for the purpose of obtaining financing, which shall include equity and/or debt, provided:

(a) The term of such mortgage, assignment or transfer shall not exceed the Term; and

(b) Successful Proposer shall give Town notice of the existence of any mortgage, assignment or transfer, together with the name and address of the mortgagee, assignee or transferee, and a copy of the mortgage, assignment or transfer document within thirty (30) days of the execution of such mortgage, assignment or transfer.

11.3 Financing by Leasehold Mortgage Release of Successful Proposer. Successful Proposer shall be relieved from its obligations under this Agreement in whole or in part, as the case may be:

(a) by any whole or partial disposition of Successful Proposer's interest in this Agreement in compliance with Section 11.1, when coupled with a written instrument signed by the assignee or transferee of such interest in which said assignee or transferee accepts and agrees to be bound by the terms of this Agreement, unless the Parties agree otherwise, and except as otherwise provided by the terms of any assignment or transfer; and

(b) in the event of any foreclosure by a Financier, in which case the Financier shall to the greatest extent possible substitute for the Successful Proposer for purposes of this Agreement.

Absent express written consent of Town, the execution of a mortgage or any assignment from a Financier to another Financier shall not relieve Successful Proposer from its obligations under this Agreement.

11.4 Financier Provisions. Any Person or entity that holds or is the beneficiary of a first position mortgage, deed of trust or other security interest in this Agreement or in any PV System located on the Premises (any such first position mortgage, deed of trust or other security interest is referred to herein as a "Leasehold Mortgage") shall, for so long as its Leasehold Mortgage is in existence and until the lien thereof has been extinguished, be entitled to the protections set forth herein. No Leasehold Mortgage shall encumber or affect in any way the interest of Town or Town's fee interest in and to the Premises, or Town's rights under this Agreement. Town shall act expeditiously, cooperatively and in good faith in facilitating any amendments to this Agreement requested by Financier in connection with the financing of the PV System.

(a) Financier's Right to Possession, Right to Acquire and Right to Assign. Pursuant to the provisions of this Section 11.4 and subject to Section 8.6, a Financier shall have the right: (i) to assign its security interest; (ii) to enforce its lien and acquire title to the leasehold estate by any lawful means; (iii) to take possession of and operate the PV System or any portion thereof and to perform all obligations to be performed by Successful Proposer hereunder, or to cause a receiver to be appointed to do so, subject to the terms and conditions of this Agreement; (iv) to acquire the leasehold estate by foreclosure or by an assignment in lieu of foreclosure; and (v) to sell the PV System and all contractual obligations pertaining to the PV System. Town's consent shall not be required for the Financier's acquisition of the encumbered leasehold estate created by this Agreement, whether by foreclosure or assignment in lieu of foreclosure.

(b) Upon the Financier's acquisition of the leasehold estate, whether by foreclosure or assignment in lieu of foreclosure, Financier shall have the right to sell or assign said acquired leasehold estate, provided Financier and proposed assignee (as applicable) shall first satisfy each of the following conditions: (i) any such assignee shall be approved in advance by Town, such approval not to be unreasonably conditioned, withheld or delayed; (ii) any such assignee shall assume all of Successful Proposer's obligations under this Agreement; (iii) Financier and/or any proposed assignee shall have satisfied every obligation of Successful Proposer existing under this Agreement but which remains unsatisfied at the time of the proposed assignment; and (iv) Financier and any such assignee shall satisfy all Applicable Legal Requirements.

(c) Notice of Default; Opportunity to Cure. The Financier shall be entitled to receive notice of any default by Successful Proposer, provided that such Financier shall have first delivered to Town a notice of its interest in the Leasehold Mortgage in the form and manner, if any, provided by state laws, rules, regulations, Successful Proposer's procedures, and the provisions of this Agreement. If any notice shall be given of the default of Successful Proposer and Successful Proposer has failed to cure or commence to cure such default within the cure period provided in this Agreement, then any such Financier, which has given notice as above provided, shall be entitled to receive an additional notice that Successful Proposer has failed to cure such default and such Financier shall have sixty (60) days after such additional notice to cure any such default or, if such default cannot be cured within sixty (60) days, to diligently commence curing within such time and diligently pursue such cure to completion within such time as Successful Proposer would have been allowed pursuant to Article VIII (Termination; Default; Remedies; Purchase Options) but as measured from the date of such additional notice. The Financier may take possession of the Premises and the PV System, and operate the PV System if necessary, pursuant to Section 8.6.

ARTICLE XII: INTENTIONALLY OMITTED

ARTICLE XIII: MISCELLANEOUS

13.1 Governing Law. This Agreement and the rights and duties of the Parties hereunder shall be governed by and shall be construed, enforced and performed in accordance with the laws of the Commonwealth of Massachusetts without regard to principles of conflicts of law.

13.2 Notices. All notices, demands, requests, consents or other communications required or permitted to be given or made under this Agreement shall be in writing and addressed to the following:

If to Town: Charles L. Sumner
Town Administrator
Town of Brewster
2198 Main Street
Brewster, Massachusetts 02631

with a copy to:
Zisson and Veara
Post Office Box 2031

Dennis, Massachusetts 02638

If to Successful Proposer: Luke Hinkle
Brewster Community Solar Garden, LLC
326 Yankee Drive
Brewster, Massachusetts 02631

Notices hereunder shall be deemed properly served: (a) by hand delivery, on the day and at the time on which delivered to the intended recipient at the address set forth in this Agreement; (b) if sent by mail, on the third business day after the day on which deposited in the United States certified or registered mail, postage prepaid, return receipt requested, addressed to the intended recipient at its address set forth in this Agreement; or (c) if by Federal Express or other reputable express mail service, on the next business day after delivery to such express mail service, addressed to the intended recipient at its address set forth in this Agreement. Either Party may change its address and contact person for the purposes of this Section 13.2 by giving notice thereof in the manner required herein.

13.3 Entire Agreement; Amendments; Binding Effect. This Agreement, and the Request for Proposals and Proposal incorporated herein, constitute the entire agreement between the Parties hereto with respect to the subject matter hereof and supersede all prior oral or written agreements and understandings between the Parties relating to the subject matter hereof. This Agreement may only be amended or modified by a written amendment to this Agreement signed by both Parties hereto. This Agreement inures to the benefit of and is binding upon the Parties and their respective successors and permitted assigns.

13.4 Expenses. Each Party hereto shall pay all expenses incurred by it in connection with its entering into this Agreement, including but not limited to, all attorneys' fees and expenses.

13.5 No Joint Venture. Nothing herein contained shall be deemed to constitute either Party a partner, agent or legal representative of the other Party or to create a joint venture, partnership, agency or any relationship between the Parties. The obligations of the Parties are individual and not collective in nature.

13.6 Joint Work-product. This Agreement shall be considered the work-product of both Parties hereto, and, therefore, no rule of strict construction shall be applied against either Party.

13.7 Waiver. No waiver by either Party hereto of any one or more defaults by the other Party in the performance of any provision of this Agreement shall operate or be construed as a waiver of any future default, whether of like or different character. No failure on the part of either Party hereto to complain of any action or non-action on the part of the other Party, no matter how long the same may continue, shall be deemed to be a waiver of any right hereunder by the Party so failing. A waiver of any of the provisions of this Agreement shall only be effective if made in writing and signed by the Party who is making such waiver.

13.8 Severability. If any article, section, phrase or portion of this Agreement is, for any reason, held or adjudged to be invalid, illegal or unenforceable by any court of competent jurisdiction, such article, section, phrase, or portion so adjudged shall be deemed separate, severable and independent and the remainder of this Agreement shall be and remain in full force and effect and shall not be invalidated or rendered illegal or unenforceable or otherwise affected by such adjudication, provided the basic purpose of this Agreement and the benefits to the Parties are not substantially impaired.

13.9 Further Assurances. From time to time and at any time at and after the execution of this Agreement, each Party shall execute, acknowledge and deliver such documents and assurances, reasonably requested by the other and shall take any other action consistent with the terms of this Agreement that may be reasonably requested by the other for the purpose of effecting or confirming any of the transactions contemplated by this Agreement.

13.10 Headings and Captions. The headings and captions appearing in this Agreement are intended for reference only, and are not to be considered in construing this Agreement.

13.11 Survival. Termination of this Agreement for any reason shall not relieve Town or Successful Proposer of any obligation accrued or accruing prior to such termination, including, but not limited to, the obligations set forth in Article IX (Insurance), which shall survive the expiration or termination of this Agreement. Article IX (Insurance) shall expire three (3) years after the Termination Date, including any extensions thereof, of this Agreement.

13.12 Counterparts; Scanned Copy. This Agreement may be executed in counterparts, each of which shall be deemed an original and all of which shall constitute one and the same instrument. The Parties agree that a scanned or electronically reproduced copy or image of this Agreement bearing the signatures of the Parties hereto shall be deemed an original and may be introduced or submitted in any action or proceeding as competent evidence of the execution, terms and existence of this Agreement notwithstanding the failure or inability to produce or

tender an original, executed counterpart of this Agreement and without the requirement that the unavailability of such original, executed counterpart of this Agreement first be proven.

13.13. Intentionally Omitted.

13.14. Intentionally Omitted.

13.15 No Limitation of Regulatory Authority. Except as provided in Section 2.1(c)(Leased Premises), the Parties acknowledge that nothing in this Agreement shall be deemed to be an agreement by Town to issue or cause the issuance of any permit or approval, or to limit or otherwise affect the ability of the Town or the Commonwealth of Massachusetts to fulfill its regulatory mandate or execute its regulatory powers consistent with Applicable Legal Requirements.

13.16 Notice of Lease. The parties agree to execute and acknowledge a memorandum of this Lease, substantially in the form of Exhibit F hereto, for filing with the appropriate public registry. At Landlord's request, promptly upon the expiration, or earlier termination, of the Lease Term, Tenant shall execute and deliver to Landlord a release of any document evidencing this Lease and recorded in the real property records for the location of the Premises, and Tenant hereby appoints Landlord Tenant's attorney-in-fact to execute any such document if Tenant fails to respond to Landlord's request to do so within thirty (30) days.

[The Remainder of this Page was left Blank Intentionally]

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the Effective Date.

Town of Brewster,
By its Board of Selectmen,

Brewster Community Solar Garden, LLC

Peter G. Norton , Chair

Luke Hinkle

Edward S. Lewis, Vice Chair

R. Daniel Rabold, Clerk

James W. Foley

John T. Dickson

RENT- FACTORING IN MAXIMUM SITE DEVELOPMENT CREDITS IN YEARS 1-5

Lease Year	Due Date	Amount
2012		\$ 9,500
2013	January 15, 2013	\$ 9,288
2014	January 15, 2014	\$ 9,582
2015	January 15, 2015	\$ 9,884
2016	January 15, 2016	\$ 10,194
2017	January 15, 2017	\$ 13,011
2018	January 15, 2018	\$ 13,336
2019	January 15, 2019	\$ 13,670
2020	January 15, 2020	\$ 14,012
2021	January 15, 2021	\$ 14,362
2022	January 15, 2022	\$ 14,721
2023	January 15, 2023	\$ 15,089
2024	January 15, 2024	\$ 15,466
2025	January 15, 2025	\$ 15,853
2026	January 15, 2026	\$ 16,249
2027	January 15, 2027	\$ 16,655
2028	January 15, 2028	\$ 17,072
2029	January 15, 2029	\$ 17,499
2030	January 15, 2030	\$ 17,936
2031	January 15, 2031	\$ 18,384
2032	January 15, 2032	\$ 18,844
2033	January 15, 2033	\$ 19,315
2034	January 15, 2034	\$ 19,798
2035	January 15, 2035	\$ 20,293
2036	January 15, 2036	\$ 20,800
2037	January 15, 2037	\$ 21,320
2038	January 15, 2038	\$ 21,853
2039	January 15, 2039	\$ 22,400
2040	January 15, 2040	\$ 22,960

Sample Contract Documents

Prospectus

University Park Community Solar LLC Prospectus

March 31, 2010

University Park Community Solar LLC (LLC) is licensed in the state of Maryland for the purpose of raising the necessary funds to purchase, construct, and operate a solar electric generating facility. The facility is to be installed on the roof of the University Park Church of the Brethren and at this time will be the only facility built and operated by the LLC.

Our goal is to generate clean renewable electricity within the community and reduce our dependence on fossil fuel and nuclear generated power. We plan to share our experience and knowledge with other communities interested in becoming solar communities.

The funding source is membership interests purchased by members within the Maryland community. The LLC is a for profit company in which all profits will be passed through to the members according to their membership interest percentage with the exception of the normal operating expenses such as licensing fees, accounting expenses, office supplies and postage and other normal operating expenses. There are no paid employees or commissions.

The rights and responsibilities of members will be set forth in an operating agreement that will be approved and signed by all members. There is only one type of membership interest. Each member will have a single vote in all decision-making processes and will not be affected by the amount of a member's investment.

The LLC will generate income through the sale of electricity and the sale of Renewable Energy Certificates (REC's). Income will also come through a one time federal tax credit or grant program equal to 30% of the constructed value of the facility. We intend to opt for the grant and return the proceeds to the investors. In addition the value of facility will be depreciated over a six-year period and this credit will be passed through to the members.

You should consult your tax advisor or accountant to verify your ability to take advantage of the depreciation credit.

As an investor you can at any point prior to signing the operating agreement withdraw your investment from the LLC.

The solar panels and associated equipment are subject to the normal risks of any constructed facility or building. The LLC will carry property insurance to mitigate this risk but in the event of damage there would possibly be a loss of income while the damage was repaired.

The REC's are traded like securities and the value is dependent on the forces of supply and demand. Our financial pro-forma assumes a declining value of the REC's over time but there is the risk that the values could be less or that the REC program could be impacted by factors beyond the control of the LLC.

The income from the sale of electricity is governed by a contract between the Church of the Brethren and the LLC. There is the risk that the church could be unable to fulfill its obligation under the contract for reasons outside the control of the LLC

Business Plan

The accompanying financial analysis presents a hypothetical cash flow for the facility over a twenty-year period. These cash flows are estimates and the actual cash flows may vary. It shows that we expect to recover our full investment in 5-6 years and that the nominal annualized return on investment will be approximately 7-9%.

We urge potential members to come to study the incentive programs and cash flow assumptions on which our business plan is based. Please contact the organizing committee members to answer any questions regarding the LLC, the solar project, or your financial investment.

Sample Contract Documents

LLC Operating Agreement

University Park Community Solar LLC Operating Agreement

This Operating Agreement (this "Agreement"), dated as of _____, 2010, of University Park Community Solar LLC, a Maryland limited liability company (the "Company"), is made and entered into by and among the parties listed on Exhibit B attached to this Agreement.

RECITALS

- A. The parties hereto have agreed to organize and operate a limited liability company in accordance with the terms of, and subject to the conditions set forth in, this Agreement in order to fund a solar electric generating system and to demonstrate that a community effort can make a contribution to reducing carbon emissions, increasing options for renewable energy sources, and capturing financial incentives for the benefit of all.
- B. In accordance with subscription agreements between the parties hereto and the Company, the parties hereto have agreed to make certain investments in the Company pursuant and subject to the terms and conditions set forth therein.
- C. The parties hereto desire to enter into this Agreement to regulate the affairs of the Company, the conduct of its business and the relations of the Members with respect thereto.

NOW, THEREFORE, in consideration of the foregoing recitals, the mutual agreements contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto, intending legally to be bound, hereby agree as follows:

Article 1 Defined Terms

Capitalized terms used in this Agreement shall, unless the context otherwise requires, have the meanings set forth in Exhibit A attached hereto.

Article 2 Formation and Name; Office; Purpose; Term

2.1 Organization. The parties hereto have formed the Company as a limited liability company pursuant to the Act and, for that purpose, caused the Articles of Organization to be filed with SDAT.

2.2 Name of the Company. The name of the Company shall be "University Park Community Solar LLC." The Company may do business under that name and under any other name or names upon which the Members agree. If the Company does business under a name

other than that set forth in its Articles of Organization, then the Company shall file a trade name certificate as required by Applicable Law.

2.3 Purpose. The Company is organized to organize, develop, install, construct, own, operate, manage and sell community based solar projects and to do any and all things necessary, convenient, or incidental to that purpose.

2.4 Powers. Subject to all of the terms, agreements, conditions and limitations contained in this Agreement, the Company shall have all of the powers provided for in the Act, including all power and authority to enter into and perform contracts of any kind, and borrow money and issue evidences of indebtedness, whether or not secured by a mortgage, deed of trust, pledge or other lien.

2.5 Principal Office. The principal office of the Company in the State of Maryland shall be located at 4313 Tuckerman Street, University Park, Maryland 20782, or at any other place within the State of Maryland as the Members may from time to time designate in accordance with the Act. The Company may also maintain offices and places of business at such other place or places within or outside the State of Maryland as the Members deem advisable.

2.6 Resident Agent. The name and address of the Company's resident agent in the State of Maryland shall be David Brosch, 4313 Tuckerman Street, University Park, Maryland 20782. The Members may from time to time change the Company's registered agent in accordance with the Act.

2.7 Members. The name, present mailing address, taxpayer identification number, Capital Contribution and Percentage Interest of each Member are set forth in Exhibit B. The Management Committee shall update Exhibit B from time to time as necessary to reflect changes to the information therein. An amendment or revision to Exhibit B made in accordance with this Agreement shall not be deemed an amendment to this Agreement. Any reference in this Agreement to Exhibit B shall be deemed a reference to Exhibit B as amended and in effect from time to time

Article 3

Capital; Capital Accounts

3.1 Initial Capital Contributions. The Members shall each make a Capital Contribution to the Company of cash in the amount of at least Two Thousand Dollars (\$2,000.00).

3.2 No Other Capital Contributions Required. No Member shall be required to contribute any additional capital to the Company, and except as set forth in the Act, no Member shall have any personal liability for any obligations of the Company.

3.3 No Interest on Capital Contributions. Interest Holders shall not be paid interest on their Capital Contributions.

3.4 Return of Capital Contributions. Except as otherwise provided in this Agreement, no Interest Holder shall have the right to receive the return of any Capital Contribution.

3.5 Form of Return of Capital. If an Interest Holder is entitled to receive a return of a Capital Contribution, the Company may distribute cash, notes, property, or a combination thereof to the Interest Holder in return of the Capital Contribution.

3.6 Capital Accounts. A separate Capital Account shall be maintained for each Interest Holder.

3.7 Loans. Any Member may, at any time, make or cause a loan to be made to the Company in any amount and on those terms upon which the Company and the Member agree.

3.8 Avoidance of Publicly-Traded Partnership Status.

3.8.1 To permit the Company to qualify for the benefit of a "safe harbor" under Code Section 7704, notwithstanding anything to the contrary in this Agreement, no Transfer of all or any portion of a Member's Interest shall be permitted or recognized by the Company (within the meaning of Regulation Section 1.7704-1(d)), and the Company shall not issue any Interest if and to the extent that the Transfer or issuance would cause the Company to have more than one hundred (100) partners (within the meaning of Regulation Section 1.7704-1(h), including the look-through rule in Regulation Section 1.7704-1(h)(3)).

3.8.2 Notwithstanding anything to the contrary in this Agreement, no Interest may be Transferred, and the Company may not issue any Interest, unless (i) the Transfer or issuance, as the case may be, shall not affect the Company's existence or qualification as a limited liability company under the Act, (ii) the Transfer or issuance, as the case may be, shall not cause the Company to be classified as other than a partnership for United States federal income tax purposes, (iii) the Transfer or issuance, as the case may be, shall not result in a termination of the Company under Code Section 708, unless the Members determine that a termination will not have a material adverse impact on the Members and (iv) the Transfer or issuance, as the case may be, shall not cause the application of the tax-exempt use property rules of Code Sections 168(g)(1)(B) and 168(h) to the Company or the Members.

Article 4

Distributions

4.1 Distributions of Cash Flow. Cash Flow for each taxable year of the Company shall be distributed to the Interest Holders in proportion to their Percentage Interests no later than seventy-five (75) days after the end of the taxable year. All distributions shall be made to the Persons shown on the records of the Company to have been Interest Holders as of the last day of the taxable year for which the distribution is to be made.

4.2 Timing of Distributions. Subject to Section 4.1, the timing and amount of all distributions shall be determined by the Management Committee.

4.3 Amounts Withheld. All amounts withheld by the Company pursuant to the Code or any provision of Applicable Law with respect to any payment, distribution or allocation to any

Interest Holder shall be remitted to the appropriate Governmental Authority, treated as amounts distributed to that Interest Holder pursuant to this Article 4 for all purposes under this Agreement and shall accordingly reduce by a corresponding amount distributions the Interest Holder would otherwise receive pursuant to this Article 4 or Article 8. Each Interest Holder agrees to furnish the Company with such certifications and forms as shall reasonably be requested by the Company to assist it in determining the extent of, and in fulfilling its withholding obligations.

4.4 Distributions in Kind. If any assets of the Company are distributed in kind to the Interest Holders, those assets shall be valued on the basis of their fair market value, and any Interest Holder entitled to any interest in those assets shall receive that interest as a tenant-in-common with all other Interest Holders so entitled. Unless the Members otherwise agree, the fair market value of the assets shall be determined by an independent appraiser who shall be selected by the Members.

4.5 Distributions upon Liquidation. Distributions made in conjunction with the final liquidation of the Company shall be applied or distributed as provided in Article 8.

Article 5

Allocations of Profits and Losses

5.1 Book Allocations. Unless otherwise provided in this Agreement, an allocation to a Member of a share of Profits or Losses and receipts from grants shall be treated as an allocation of the same share of each item of income, gain, grant, loss or deduction that is taken into account in computing Profits or Losses. After giving effect to the special allocations set forth in Section 5.2 and Section 5.3 and subject to Section 5.4 and Section 5.5, Profits, Losses and receipts from grants for any Allocation Year shall be allocated as follows:

(a) All items of Loss shall be allocated as follows:

(1) First, to the Members in the same manner and proportions as Profits and receipts from grants were previously allocated under Section 5.1(b)(2) to the extent of the aggregate Profits allocated pursuant to Section 5.1(b)(2) for all periods over the aggregate Losses allocated pursuant to this Section 5.1(a)(1) for all prior periods; and

(2) Second, to the Members in proportion to their Percentage Interests.

(b) All items of Profit and receipts from grants shall be allocated as follows:

(1) First, to the Members in the same manner and proportions as Losses were previously allocated under Section 5.1(a)(2) to the extent of the aggregate Losses allocated pursuant to Section 5.1(a)(2) for all periods over the aggregate Profits and receipts from grants allocated pursuant to this Section 5.1(b)(1) for all prior periods; and

(2) Second, to the Members in proportion to their Percentage Interests.

5.2 Special Allocations. The following special allocations shall be made in the following order:

(a) Company Minimum Gain Chargeback. Except as otherwise provided in Regulations Section 1.704-2(f), notwithstanding any other provision of this Article 5, if there is a net decrease in Company Minimum Gain during any Allocation Year, each Member shall be allocated items of Company income and gain for such Allocation Year (and, if necessary, subsequent Allocation Years) in an amount equal to such Member's share of the net decrease in Company Minimum Gain, determined in accordance with Regulations Section 1.704-2(g). Allocations pursuant to the previous sentence shall be made in proportion to the respective amounts required to be allocated to each Member pursuant thereto. The items to be so allocated shall be determined in accordance with Regulations Sections 1.704-2(f)(6) and 1.704-2(j)(2). This Section 5.2(a) is intended to comply with the minimum gain chargeback requirement in Regulations Section 1.704-2(f) and shall be interpreted consistently therewith.

(b) Member Minimum Gain Chargeback. Except as otherwise provided in Regulations Section 1.704-2(i)(4), notwithstanding any other provision of this Article 5, if there is a net decrease in Member Nonrecourse Debt Minimum Gain attributable to a Member Nonrecourse Debt during any Allocation Year, each Member who has a share of the Member Nonrecourse Debt Minimum Gain attributable to such Member Nonrecourse Debt, determined in accordance with Regulations Section 1.704-2(i)(5), shall be allocated items of Company income and gain for such Allocation Year (and, if necessary, subsequent Allocation Years) in an amount equal to such Member's share of the net decrease in Member Nonrecourse Debt Minimum Gain, determined in accordance with Regulations Section 1.704-2(i)(4). Allocations pursuant to the previous sentence shall be made in proportion to the respective amounts required to be allocated to each Member pursuant thereto. The items to be so allocated shall be determined in accordance with Regulations Sections 1.704-2(i)(4) and 1.704-2(j)(2). This Section 5.2(b) is intended to comply with the minimum gain chargeback requirement in Regulations Section 1.704-2(i)(4) and shall be interpreted consistently therewith.

(c) Qualified Income Offset. In the event any Member unexpectedly receives any adjustments, allocations, or distributions described in Regulations Section 1.704-1(b)(2)(ii)(d)(4), Section 1.704-1(b)(2)(ii)(d)(5), or Section 1.704-1(b)(2)(ii)(d)(6), items of Company income and gain shall be allocated to such Member in an amount and manner sufficient to eliminate, to the extent required by the Regulations, the Adjusted Capital Account Deficit of the Member as quickly as possible, provided that an allocation pursuant to this Section 5.2(c) shall be made only if and to the extent that the Member would have an Adjusted Capital Account Deficit after all other allocations provided for in this Article 5 have been tentatively made as if this Section 5.2(c) were not in the Agreement.

(d) Gross Income Allocation. In the event any Member has a deficit Capital Account at the end of any Allocation Year that is in excess of the sum of the amount such Member is expressly obligated to restore pursuant to this Agreement and the amount such Member is deemed to be obligated to restore pursuant to Regulations Section 1.704-1(b)(2)(ii)(c) or either of the penultimate sentences of Regulations Sections 1.704-2(g)(1) and 1.704-2(i)(5), such Member shall be allocated items of Company income and gain in the amount of such excess as quickly as possible, provided that an allocation pursuant to this Section 5.2(d) shall be made only if and to the extent that such Member would have a deficit Capital Account in excess of such sum after all other allocations provided for in this Article 5 have been made as if Section 5.2(c) and this Section 5.2(d) were not in the Agreement.

(e) Nonrecourse Deductions. Nonrecourse Deductions for any Allocation Year shall be allocated to the Members in proportion to their respective Percentage Interests.

(f) Member Nonrecourse Deductions. Any Member Nonrecourse Deductions for any Allocation Year shall be allocated to the Member who bears the economic risk of loss with respect to the Member Nonrecourse Debt to which such Member Nonrecourse Deductions are attributable in accordance with Regulations Section 1.704-2(i)(1).

(g) Section 754 Adjustments. To the extent an adjustment to the adjusted tax basis of any Company asset, pursuant to Code Section 734(b) or Section 743(b) is required, pursuant to Regulations Section 1.704-1(b)(2)(iv)(m)(2) or Section 1.704-1(b)(2)(iv)(m)(4), to be taken into account in determining Capital Accounts as the result of a distribution to a Member in complete liquidation of such Member's interest in the Company, the amount of such adjustment to Capital Accounts shall be treated as an item of gain (if the adjustment increases the basis of the asset) or loss (if the adjustment decreases such basis) and such gain or loss shall be allocated to the Members in accordance with their interests in the Company in the event Regulations Section 1.704-1(b)(2)(iv)(m)(2) applies, or to the Member to whom such distribution was made in the event Regulations Section 1.704-1(b)(2)(iv)(m)(4) applies.

5.3 Curative Allocations. The allocations set forth in Sections 5.2 and 5.4 (the "Regulatory Allocations") are intended to comply with certain requirements of the Regulations. It is the intent of the Members that, to the extent possible, all Regulatory Allocations shall be offset either with other Regulatory Allocations or with special allocations of other items of Company income, gain, loss, or deduction. Therefore, notwithstanding any other provision of this Article 5 (other than the Regulatory Allocations), the Management Committee shall make (or cause to be made) such offsetting special allocations of Company income, gain, loss, or deduction in a manner so that, after such offsetting allocations are made, each Member's Capital Account balance is, to the extent possible, equal to the Capital Account balance such Member would have had if the Regulatory Allocations were not part of the Agreement and all Company items were allocated pursuant to Section 5.1.

5.4 Loss Limitation. Losses allocated pursuant to Section 5.1 shall not exceed the maximum amount of Losses that can be allocated without causing any Member to have an Adjusted Capital Account Deficit at the end of any Allocation Year. In the event some but not all of the Members would have Adjusted Capital Account Deficits as a consequence of an allocation of Losses pursuant to Section 5.1, the limitation set forth in this Section 5.4 shall be applied on a Member by Member basis and Losses not allocable to any Member as a result of such limitation shall be allocated to the other Members in accordance with the positive balances in such Members' Capital Accounts so as to allocate the maximum permissible Losses to each Member under Regulations Section 1.704-1(b)(2)(ii)(d).

5.5 Other Allocation Rules.

5.5.1 For purposes of determining the Profits, Losses, or any other items allocable to any period, Profits, Losses, and any such other items shall be determined on a daily, monthly, or other basis, as determined by the Management Committee using any permissible method under Code Section 706 and the Regulations thereunder.

5.5.2 The Members are aware of the income tax consequences of the allocations made by this Article 5 and Article 8.

5.5.3 Solely for purposes of determining a Member's proportionate share of the "excess nonrecourse liabilities" of the Company within the meaning of Regulations Section 1.752-3(a)(3), the Members' interests in Company profits are in proportion to their Percentage Interests.

5.6 Tax Allocations; Code Section 704(c).

5.6.1 Except as otherwise provided in this Section 5.6, each item of income, gain, loss and deduction of the Company for federal, state, local and foreign tax purposes shall be allocated among the Members in the same manner as such items are allocated for book purposes under this Article 5 and Article 8. Any tax credits of the Company shall be allocated to the Members in proportion to their Percentage Interests.

5.6.2 In accordance with Code Section 704(c) and the Regulations thereunder, income, gain, loss, and deduction with respect to any property contributed to the capital of the Company shall, solely for tax purposes, be allocated among the Members so as to take account of any variation between the adjusted basis of such property to the Company for federal income tax purposes and its initial Gross Asset Value (computed in accordance with the definition of Gross Asset Value) using the method described under Treasury Regulation Section 1.704-3(b).

5.6.3 In the event the Gross Asset Value of any Company asset is adjusted pursuant to subparagraph (ii) of the definition of Gross Asset Value, subsequent allocations of income, gain, loss, and deduction with respect to such asset shall take account of any variation between the adjusted basis of such asset for federal income tax purposes and its Gross Asset Value in the same manner as under Code Section 704(c) and the Regulations thereunder using the allocation method described under Treasury Regulation Section 1.704-3(b).

5.6.4 Except as otherwise provided in Section 5.6.2 and 5.6.3 above, any elections or other decisions relating to the allocations described in this Section 5.6 shall be made by the Tax Matters Partner in any manner that reasonably reflects the purpose and intention of this Agreement. Allocations pursuant to this Section 5.6 are solely for purposes of federal, state, local, and foreign taxes and shall not affect, or in any way be taken into account in computing, any Member's Capital Account or share of Profits, Losses, other items, or distributions pursuant to any provision of this Agreement.

5.6.5 To the extent the Code and the Regulations or other Applicable Law require allocations for tax purposes that differ from the foregoing allocations, the Tax Matters Partner, in its reasonable discretion, may determine the manner in which such tax allocations shall be made so as to comply more fully with the Code and such Regulations or other Applicable Law and, at the same time, preserve the economic relationships among the Members as otherwise set forth in this Agreement.

5.7 Tax Status; Tax Elections; Tax Matters Partner.

5.7.1 No election shall be made by the Company or any Member to have the Company excluded from the application of Subchapter K, Chapter 1 of Subtitle A of the Code or from any similar provisions of any other Applicable Law.

5.7.2 At the first meeting of the Members, the Members shall appoint one of the Members to be "Tax Matters Partner" of the Company under the Code and in any similar capacity under Applicable Law. If such Person ceases to be a Member, the Members shall promptly appoint a new Tax Matters Partner. The Tax Matters Partner shall cause the Company's accountants to prepare all federal, state and local tax returns of the Company for each year for which such returns are required to be filed and shall cause such returns to be timely filed. To the extent not otherwise provided in this Agreement, the Tax Matters Partner shall have the authority to make all tax elections and other tax decisions on behalf of the Company; provided that the Tax Matters Partner shall follow the instruction of each Member with respect to the tax treatment of such Member's distributive share of any cancellation of indebtedness income in case the Company makes an election under Code Section 108(i), in accordance with Revenue Procedure 2009-37 and any similar guidance issued by the Internal Revenue Service. The Tax Matters Partner shall have the right to extend the statute of limitations for assessment of tax deficiencies against the Members with respect to adjustments to the Company's federal, state, local, or foreign tax returns; and (ii) to the extent provided in Code Sections 6221 through 6234 and similar provisions of other Applicable Law, represent the Company and the Members before taxing authorities or courts of competent jurisdiction in tax matters affecting the Company or the Members in their capacities as members, and file any tax returns and execute any agreements or other documents relating to or affecting such tax matters, including agreements or other documents that bind the Members with respect to such tax matters or otherwise affect the rights of the Company and the Members and shall provide timely notice of any such action to the Members. The Tax Matters Partner is further authorized and required to represent the Company in connection with all examinations of the Company's affairs by tax authorities, including resulting administrative and judicial proceedings, and to expend Company funds for professional services and costs associated therewith. The Members agree to cooperate with the Tax Matters Partner and to do or refrain from doing any or all things reasonably required by the Tax Matters Partner to conduct such proceedings. Any reasonable direct out-of-pocket expense incurred by the Tax Matters Partner in carrying out its obligations hereunder shall be allocated to and charged to the Company as an expense of the Company for which the Tax Matters Partner shall be reimbursed.

5.7.3 Each Member agrees that if it (i) treats, on its tax returns, any item of income, gain, loss, deduction, credit or expense relating to its Membership Interest in the Company in a manner inconsistent with the treatment of such item by the Company as reflected on the Company's Internal Revenue Service Form 1065, the Internal Revenue Service Form 1065 (Schedule K-1) issued to such Member, or other information statement furnished by the Company to such Member for use in preparing such Member's tax returns or (ii) files any claim for refund relating to any such item based on, or that would result in, such inconsistent treatment, it shall notify the Tax Matters Partner of such action within ninety (90) days after the filing of such relevant returns or refunds.

5.7.4 If so requested by any Member in a written notice to the Company (which notice may be delivered at any time prior to the filing of the U.S. federal income tax return for the last taxable year in which such Member is a Member of the Company), the Tax Matters Partner shall cause the Company to make an election under Section 754 of the Code.

5.7.5 The provisions of this Section 5.7 regarding tax matters shall survive the termination of this Agreement and the Transfer or termination of any Member's Interest in the Company.

Article 6

Management: Rights, Powers, and Duties

6.1 Management.

6.1.1 The Company shall be managed by the Members as group, who shall have the full, and complete discretion, power, and authority, subject to the other provisions of this Agreement and the requirements of Applicable Law, to manage, control, administer, and operate the business and affairs of the Company for the purposes herein stated and to make all decisions concerning its business and affairs.

6.1.2 The provisions contained in this Section 6.1 supersede any authority granted to individual Members pursuant to Section 4A-401 of the Act. Any Member who takes any action or binds the Company without authorization by the Members or the Management Committee, as applicable, shall be solely responsible for any loss or expense incurred as a result of the unauthorized action and shall indemnify and hold the Company harmless with respect to the loss or expense.

6.2 Meetings of and Voting by Members

6.2.1 Annual meetings of the Members shall be held on such date, at such time and at such place as may be designated by the Management Committee, except that the first annual meeting of the Members shall be held at 7:30 p.m. on May 6, 2010, at the Company's principal office. At each annual meeting, the Members shall elect a Management Committee and may transact such other proper business as may come before the meeting.

6.2.2 Special meetings of the Members may be called at any time in the interval between annual meetings, by any Member. Special meetings of the Members shall be held at the Company's principal office or at any other reasonable place in University Park, Maryland, designated by the Member calling the meeting. Not less than ten (10) nor more than ninety (90) days before each meeting, the Member calling the meeting shall give written notice of the meeting to each Member. The notice shall state the time, place, and purpose of the meeting. Notwithstanding the foregoing provisions, each Member waives notice if before or after the meeting the Member signs a waiver of the notice which is filed with the records of Members' meetings, or is present at the meeting in person or by proxy unless such attendance is solely for the express purpose of objecting, at the beginning of such meeting, to the transaction of any business because the meeting is not lawfully called or convened.

6.2.3 At a meeting of Members, the presence in person or by proxy of Members holding not less than one third of the total number of Members constitutes a quorum. A Member may vote either in person or by written proxy signed by the Member or by the Member's duly authorized attorney in fact. Membership Rights in multiple names have one vote and only one vote and any one or more of the owners of such Membership Rights shall be deemed one person for the purposes of a quorum.

6.2.4 The affirmative vote of a majority of Members in attendance in person or by proxy shall be required to approve any matter coming before the Members at any meeting.

6.2.5 In lieu of holding a meeting, the Members may vote or otherwise take action by a written instrument indicating the consent of a simple majority of the Members.

6.2.6 If any vote is required on any matter under this Agreement, and there are neither sufficient votes to approve nor disapprove of the matter, then a Member may require that the matter be submitted to arbitration by three arbitrators in Prince George's County, Maryland, in accordance with the rules of the American Arbitration Association.

6.3 Personal Services. No Member shall be required to perform services for the Company solely by virtue of being a Member. Unless approved by the Members, no Member shall be entitled to compensation for services performed for the Company. However, upon substantiation of the amount and purpose thereof, the Members shall be entitled to reimbursement for expenses reasonably incurred in connection with the activities of the Company.

6.4 Duties of Members.

6.4.1 A Member shall not be liable, responsible, or accountable in damages or otherwise to the Company or to any other Member for any action taken or any failure conferred on the Member by this Agreement or by Applicable Law, unless the action taken or omission was made fraudulently or in bad faith or unless the action or omission constituted gross negligence.

6.4.2 Except as otherwise expressly provided in Section 6.4.3, nothing in this Agreement shall be deemed to restrict in any way the rights of any Member to conduct any other business or activity whatsoever, and no Member shall be accountable to the Company or to any other Member with respect to that business or activity even if the business or activity competes with the Company's business. The organization of the Company shall be without prejudice to the Members' respective rights (or the rights of their respective Affiliates) to maintain, expand, or diversify such other interests and activities and to receive and enjoy profits or compensation therefrom. Each Member waives any rights the Member might otherwise have to share or participate in such other interests or activities of any other Member or the Member's Affiliates.

6.4.3 Each Member understands and acknowledges that the conduct of the Company's business may involve business dealings and undertakings with Members and their Affiliates. In any of those cases, those dealings and undertakings shall be at arm's length and on commercially reasonable terms.

6.5 Management Committee.

6.5.1 Delegation to Management Committee. Day-to-day operation of the business of the Company shall be delegated to a management committee made up of Members elected as Representatives by the Members in accordance with Section 6.5.2 (the "Management Committee"); provided, that the Management Committee shall carry out such day-to-day operations in a manner consistent with (a) any and all other Member-approved budgets, and (b) otherwise in accordance with the terms of this Agreement; and provided, further, that the Members shall oversee and manage the performance by the Management Committee and shall ultimately direct any powers which are to be exercised by the Management Committee; and provided, also, that if no Management Committee shall have been elected by the Members, then the Members shall manage the operations and business of the Company.

6.5.2 Number. The Management Committee shall consist of seven (7) of the Members (each, a "Representative"). At the first meeting of the Members and at each annual meeting thereafter, the Members shall elect Representatives to hold office until the next annual meeting or until their successors are elected and qualify, or until they sooner die, resign or are removed. At each annual meeting of Members, at which a quorum is present, the persons receiving a plurality of the votes cast shall be the Representatives.

6.5.3 Resignation; Removal; Vacancies. A Representative may resign as such by delivering written notice to that effect to the Members at least thirty (30) days prior to the effective date of such resignation. A Representative may be removed at any time and for any reason by the Members. In the event a vacancy on the Management Committee occurs as a result of the death, disability, resignation, removal or otherwise of a Representative, a meeting of the Members shall be held to elect a replacement and the person receiving a plurality of the votes cast at such meeting shall be the replacement Representative.

6.5.4 Chair. The chairperson of the Management Committee will be one of the appointed Representatives and will serve for a term of one (1) year and until his or her successor is appointed or until his or her earlier death, incapacity, resignation or removal. The chair shall be elected by the Management Committee, shall preside at all meetings of the Management Committee and shall have the same voting rights as any other Representative.

6.5.5 Quorum and Manner of Acting. Unless otherwise provided by Applicable Law, the presence of a majority of the Representatives then in office shall constitute a quorum for the transaction of business and the vote of a majority of the Representatives present at any meeting at which a quorum is present shall be the act of the Management Committee, except as may be otherwise specifically provided by Applicable Law or by the Articles of Organization. The Management Committee may hold meetings, both regular and special, at such place or places within or outside College Park, Maryland as the Management Committee may from time to time determine.

6.5.6 Action by Written Consent. Any action may be taken without a meeting and without a vote if a consent in writing, setting forth the action so taken, shall be signed by all of the Representatives. Any action taken by the written consent of the Representatives shall have the same force and effect as if taken by the Representatives at a meeting.

6.5.7 Telephonic Meetings. Representatives may participate in any meeting of the Management Committee by means of a conference telephone or similar communication equipment by which all Representatives participating in the meeting can hear and speak to each other at the same time. Such participation shall constitute presence in person at the meeting.

6.5.8 Proxy. Any Representative may execute a written proxy in favor of any other Representative permitting such other Representative to vote at the Management Committee on behalf of such first Representative. In the event that a Representative is represented by proxy at any meeting of the Management Committee, such Representative shall be deemed to be present and voting in person for purposes of this Agreement.

6.5.9 Compensation of Representatives. Representatives shall not be entitled to compensation or remuneration. However, upon substantiation of the amount and purpose thereof, Representatives shall be entitled to reimbursement for expenses reasonably incurred in connection with the activities of the Company. The Representatives shall not be employees of the Company or entitled to receive any other compensation from the Company.

6.6 Matters Requiring Members Approval. Without limiting the generality of Section 6.5.1, decisions in connection with all of the following matters shall be determined by the Members pursuant to Section 6.2:

- (a) amending, modifying or restating the Articles of Organization or this Agreement;
- (b) selling, exchanging, leasing or otherwise transferring any assets of the Company except as set forth in a budget approved by the Members;
- (c) admission of any new Member to the Company;
- (d) entering into transactions with any Member or such Member's Affiliate;
- (e) participating in any mergers, consolidations, or other similar business combination;
- (f) dissolving or winding up the Company;
- (g) filing a voluntary bankruptcy petition on behalf of the Company;
- (h) approving budgets;
- (i) expenditures by the Company in excess of the amounts set forth in a budget approved by the Members;
- (j) incurring indebtedness on behalf of the Company, including Member loans pursuant to Section 3.7 and financings, refinancings or creating Liens on any Company Assets;

(k) entering into or terminating agreements with legal, tax, financial advisors, auditors, and insurance agents;

(l) investing or lending any funds, other than liquid short-term (not more than 180 days) investments of working capital or reserves using such financial institutions and instruments as have been approved by the Members and in amounts not to exceed \$25,000;

(m) electing and removing Representatives;

(n) commencing or settling any litigation, arbitration or similar proceeding;

(o) establishing, increasing or decreasing any reserves;

(p) hiring or terminating any employee of the Company;

(q) entering into, amending or terminating Contracts;

(r) entering into a new business or market, changing the scope or nature of the existing business or the creation of any subsidiaries;

(s) agreeing to any confession of judgment against the Company;

(t) accepting or rejecting an Offer;

(u) any other matter that this Agreement provides is subject to the approval of the Members.

6.7 Liability and Indemnification.

6.7.1 Limitation on Liability. No Member or Representative shall be liable, responsible, or accountable, in damages or otherwise, to any other Member or to the Company for any act performed by the Member or Representative with respect to Company matters, except for fraud, gross negligence, or an intentional breach of this Agreement.

6.7.2 Indemnification. The Company shall indemnify, defend and hold harmless the Members and the Representatives and the heirs, executors, successors and assigns of each thereof (collectively, the “Indemnified Parties”) to the full extent permitted by Applicable Law from and against any and all losses, claims, demands, costs, damages, liabilities, joint and several, reasonable expenses of any nature (including reasonable attorneys’ fees and disbursements), judgments, fines, settlements and other amounts arising from any and all claims, demands, actions, suits or proceedings, civil, criminal, administrative or investigative, in which such Indemnified Party may be involved, or threatened to be involved, as a party or otherwise, relating to acts or omissions of such Indemnified Party except for fraud, gross negligence, or an intentional breach of this Agreement.

6.7.2.1 The indemnification obligations contained in Section 6.7.2 will survive any dissolution of the Company until its affairs have been fully wound up and all of its properties and assets distributed in accordance with this Agreement.

6.7.2.2 If the Company is obligated hereunder to indemnify any Indemnified Party from any claim, suit, action or proceeding brought by any third party (a "Third Party Claim"), the Indemnified Party shall give notice as promptly as is reasonably practicable to the Indemnified Party of such Third Party Claim; provided that the failure of the Indemnified Party to give notice shall not relieve the Company of its obligations under this Section 6.7.2, except to the extent (if any) that the Company shall have been materially prejudiced thereby. The Company will have the right to control the defense and settlement of such Third Party Claim with counsel reasonably acceptable to the Indemnified Party, provided that (i) such Indemnified Party may retain counsel at its expense to assist in the defense and settlement of such Third Party Claim, and (ii) no settlement of any Third Party Claim will contain terms or provisions requiring the Indemnified Party to take any action or perform any undertaking, or prohibit or restrain the Indemnified Party from taking any action, without the written consent of the Indemnified Party.

6.7.2.3 Without the prior written consent of the Company, the Indemnified Party shall not accept any settlement or compromise of any claim, suit, action or proceeding of the nature referred to in 6.7.2.2 above.

6.7.2.4 Expenses incurred by an Indemnified Party in defending any claim, demand, action, suit or proceeding subject to this Section 6.7.2 shall be advanced by the Company prior to the final disposition of such claim, demand, action, suit, or proceeding upon receipt by the Company of a written commitment by or on behalf of such Indemnified Party to repay such amount if it shall be determined that such Indemnified Party is not entitled to be indemnified as authorized in this Section 6.7.2.

6.7.2.5 Notwithstanding the foregoing provisions, this Section 6.7.2 shall be enforced only to the maximum extent permitted by Applicable Law and no Indemnified Party shall be indemnified from any liability for fraud, gross negligence, or an intentional breach of this Agreement.

6.7.2.6 The provisions of this Section 6.7.2 are for the benefit of the Indemnified Parties only and shall not be deemed to create any rights for the benefit of any other Person.

6.7.2.7 In no event may an Indemnified Party subject the Members to personal liability by reason of the indemnification provisions of this Agreement.

Article 7

Transfer of Interests and Withdrawals of Members

7.1 Transfers.

7.1.1 No Person may Transfer all or any portion of or any interest or rights in such Person's Membership Rights or Interest unless all of the following conditions ("Conditions of Transfer") are satisfied:

(a) the Transfer will not require registration of Interests or Membership Rights under any federal or state securities laws;

(b) the Transfer will not result in the termination of the Company pursuant to Code Section 708;

(c) the Transfer will not result in the Company being subject to the Investment Company Act of 1940, as amended or any additional federal or State securities laws or regulations;

(d) the transferor or the transferee delivers the following information to the Company: (i) the transferee's taxpayer identification number, and (ii) the transferee's initial tax basis in the Transferred Interest;

(e) the Transfer is permitted in accordance with Section 3.8;

(f) the transferor complies with the provisions set forth in Section 7.1.3; and

(g) the transferee delivers to the Company a written agreement to be bound by the terms of this Article 7.

7.1.2 Each Member hereby acknowledges the reasonableness of the prohibition contained in this Section 7.1 in view of the purposes of the Company and the relationship of the Members. The Transfer of any Membership Rights or Interests in violation of the restrictions contained in this Section 7.1 shall be deemed invalid, null and void, and of no force or effect. Any Person to whom Membership Rights are attempted to be transferred in violation of this Section shall not be entitled to vote on matters coming before the Members, be elected as a Representative or otherwise participate in the management of the Company, act as an agent of the Company, receive distributions from the Company, or have any other rights in or with respect to the Membership Rights.

7.1.3 Right of First Refusal.

7.1.3.1 If a Member (individually, a "Transferor") receives a bona fide written offer that the Member desires to accept (the "Transferee Offer") from any other Person (a "Transferee") to purchase all or any portion of or any interest or rights in the Transferor's Membership Rights (the "Transferor Interest"), then, prior to any Transfer of the Transferor Interest, the Transferor shall give the Company written notice (the "Transfer Notice") containing each of the following:

(a) the Transferee's identify;

(b) a true and complete copy of the Transferee Offer; and

(c) the Transferor's offer (the "Offer") to sell the Transferor Interest to the Company for a price equal to that contained in the Transferee Offer (or the US dollar equivalent if such price is not in US

dollars) (the "Transfer Purchase Price") and on the terms and conditions set forth in the Transferee Offer.

7.1.3.2 The Offer shall be and remain irrevocable for a period (the "Offer Period") ending at 11:59 P.M., local time at the Company's principal office, on the sixtieth (60th) day following the date the Transfer Notice is given to the Company. At any time during the Offer Period, the Company may accept the Offer by giving written notice to the Transferor of its acceptance (the "Offeree Notice"). The Transferor shall not be deemed a Member for the purpose of the vote on whether the Company shall accept the Offer. If the Company accepts the Offer, the Offeree Notice shall fix a closing date (the "Transfer Closing Date") for the purchase, which shall not be earlier than thirty (30) or more than ninety (90) days after the expiration of the Offer Period.

7.1.3.3 If the Company accepts the Offer, the Transfer Purchase Price shall be paid in immediately available funds on the Transfer Closing Date unless the Company elects prior to or on the Transfer Closing Date to pay the Transfer Purchase Price on an installment basis, in which event the Company shall evidence the obligation to pay the Transfer Purchase Price by executing and delivering a promissory note to the Transferor. The terms of such promissory note shall be for no more than five (5) equal installments to be paid annually, with simple interest computed at the Prime Rate as of the date the promissory note is signed.

7.1.3.4 If the Company rejects the Offer or fails to accept the Offer within the time and in the manner specified in Section 7.1.3.2, then the Transferor shall be entitled, for a period of thirty (30) days after the expiration of the Offer Period (the "Free Transfer Period"), to Transfer the Transferor Interest to the Transferee, for the same or greater price and on the same terms and conditions as set forth in the Transfer Notice. The Transfer shall be subject to the Conditions of Transfer (other than 7.1.1(f)).

7.1.3.5 Any Transfer by the Transferor after the last day of the Free Transfer Period or without strict compliance with the terms, provisions, and conditions of this Section and the other terms, provisions, and conditions of this Agreement shall be null and void and of no force or effect.

7.1.4 Admission of Transferee as Member. If the Conditions of Transfer are satisfied, then the transferee shall be admitted as a Member and shall be entitled to exercise the rights of a Member after the consent of a majority of Members, other than the Member whose Interest is being transferred.

7.2 Voluntary Withdrawal. No Member shall have the right or power to Voluntarily Withdraw from the Company.

7.3 Involuntary Withdrawal. Immediately upon the occurrence of an Involuntary Withdrawal, the successor of the withdrawn Member shall thereupon become an Interest Holder but shall not become a Member. The successor Interest Holder shall have all and only the rights of an Interest Holder. The withdrawn Member shall not be entitled to receive the fair value of the withdrawn Member's Membership Rights as of the date of Involuntary Withdrawal under Section 4A-606.1 of the Act.

Article 8

Dissolution, Liquidation, and Termination of the Company

8.1 Limitations. The Company may be dissolved, liquidated, and terminated only pursuant to the provisions of this Article 8 and the Members hereby irrevocably waive any and all other rights they may have to cause a dissolution of the Company or a sale or partition of any or all of the Company Assets.

8.2 Exclusive Causes. Notwithstanding the Act, the following and only the following events shall cause the Company to be dissolved, liquidated, and terminated:

- (a) the unanimous consent of the Members;
- (b) entry of a decree of judicial dissolution of the Company under Section 4A-903 of the Act; and
- (c) the sale of all or substantially all of the Company Assets.

The bankruptcy or dissolution of a Member, or the occurrence of any other event that terminates the continued membership of a Member in the Company, shall not cause a dissolution of the Company.

8.3 Effect of Dissolution. The dissolution of the Company shall be effective on the day on which the event occurs giving rise to the dissolution, but the Company shall not terminate until it has been wound up and its assets have been distributed as provided in Section 8.5. Notwithstanding the dissolution of the Company, prior to the termination of the Company, the business of the Company and the affairs of the Members, as such, shall continue to be governed by this Agreement.

8.4 Deficit Capital Accounts. Each Member shall look solely to the Company Assets for all distributions with respect to the Company, its Capital Contribution thereto, its Capital Account and its share of Profits, Losses or grants, and shall have no recourse therefore (upon dissolution or otherwise) against any other Member. If any Member has a deficit balance in its Capital Account, such Member shall have no obligation to make any contribution to the capital of the Company with respect to such deficit, and such deficit shall not be considered a debt owed to the Company or to any other Person for any purpose whatsoever.

8.5 Liquidation. Upon dissolution of the Company, the Management Committee (or, in the event there are no remaining members of the Management Committee, any Person designated by the Members) shall act as "Liquidator" of the Company. The Liquidator shall liquidate the assets of the Company, and after allocating (pursuant to Article 5) all income, gain, loss, deductions, and credits resulting therefrom, shall apply and distribute the proceeds thereof and all other Company Assets, including available cash, as follows:

- (a) First, to the payment of the obligations of the Company, to the expenses of liquidation, and to the setting up of any reserves for contingencies which the Liquidator may consider necessary.

(b) Thereafter, the then remaining Company Assets, including cash and cash equivalents, shall be distributed to the Members in proportion to the positive balances in the Members' respective Capital Accounts, determined after taking into account all Capital Account adjustments for the Company Allocation Year during which such liquidation occurs (other than the distributions made pursuant to this Section 8.5(b)), by the end of the Allocation Year in which such liquidation occurs or, if later, within 90 days after the date of the liquidation.

8.6 Compliance with Certain Requirements of Regulations. In the event the Company is "liquidated" within the meaning of Regulations Section 1.704-1(b)(2)(ii)(g), distributions shall be made in accordance compliance with Section 8.5. In the discretion of the Liquidator, a pro rata portion of the distributions that would otherwise be made to the Members pursuant to this Article 8 may be distributed to a trust established for the benefit of the Members for the purposes of liquidating Company assets, collecting amounts owed to the Company, and paying any contingent or unforeseen liabilities or obligations of the Company. The assets of any such trust shall be distributed to the Members from time to time, in the reasonable discretion of the Liquidator, in the same proportions as the amount distributed to such trust by the Company would otherwise have been distributed to the Members pursuant to Section 8.5.

8.7 Deemed Contribution and Distribution. In the event the Company is "liquidated" within the meaning of Regulations Section 1.704-1(b)(2)(ii)(g) but no event of dissolution has occurred, the assets shall not be liquidated, the Company's debts and other liabilities shall not be paid or discharged, and the Company's affairs shall not be wound up. Instead, solely for tax purposes, the Company shall be deemed to have contributed all assets and liabilities to a new limited liability company in exchange for an interest in such new limited liability company and, immediately thereafter, the Company will be deemed to liquidate by distributing interests in the new limited liability company to the Members.

8.8 Character of Liquidating Distributions. All payments made in liquidation of the Membership Interest of a Member in the Company shall be made in exchange for the interest of such Member in property pursuant to Code Section 736(b)(1), including the interest of such Member in Company goodwill.

8.9 Filing of Articles of Cancellation. If the Company is dissolved, the Liquidator shall file Articles of Cancellation with SDAT.

Article 9

Books, Records, Accounting, and Tax Elections

9.1 Bank Accounts. All funds of the Company shall be deposited in a bank account or accounts opened in the Company's name. The Management Committee shall determine the institution or institutions at which the accounts will be opened and maintained, the types of accounts, and the Persons who will have authority with respect to the accounts and the funds therein.

9.2 Books and Records. The Management Committee shall keep or cause to be kept complete and accurate books and records of the Company and supporting documentation of the transactions with respect to the conduct of the Company's business. The books and records shall

be maintained in accordance with sound accounting principles and practices and shall be available at the Company's principal office for examination by any Member or the Member's duly authorized representative at any and all reasonable times during normal business hours.

9.3 Annual Accounting Period. The annual accounting period of the Company shall be its taxable year. The Company's taxable year shall be selected by the Members, subject to the requirements and limitations of the Code.

9.4 Reports. Within seventy-five (75) days after the end of each taxable year of the Company, the Management Committee shall cause to be sent to each Person who was a Member at any time during the taxable year then ended a complete accounting of the affairs of the Company for the taxable year then ended. In addition, within seventy-five (75) days after the end of each taxable year of the Company, the Management Committee shall cause to be sent to each Person who was an Interest Holder at any time during the taxable year then ended, that tax information concerning the Company which is necessary for preparing the Interest Holder's income tax returns for that year. At the request of any Member, and at the Member's expense, the Management Committee shall cause an audit of the Company's books and records to be prepared by independent accountants for the period requested by the Member.

Article 10

General Provisions

10.1 Further Assurances. Each Member shall execute all such certificates and other documents and shall do all such filing, recording, publishing, and take such other acts as the Members deem appropriate to comply with the requirements of Applicable Law for the formation and operation of the Company and to comply with any laws, rules, and regulations relating to the acquisition, operation, or holding of the property of the Company.

10.2 Notifications. Any notice, demand, consent, election, offer, approval, request, or other communication (collectively, a "notice") required or permitted under this Agreement must be in writing and either delivered personally or sent by certified or registered mail, postage prepaid, return receipt requested. A notice must be addressed to an Interest Holder at the Interest Holder's last known address on the records of the Company. A notice to the Company must be addressed to the Company's principal office. A notice delivered personally will be deemed given only when acknowledged in writing by the person to whom it is delivered. A notice that is sent by mail will be deemed given three (3) business days after it is mailed. Any party may designate, by notice to all of the others, substitute addresses or addressees for notices; and, thereafter, notices are to be directed to those substitute addresses or addressees.

10.3 Governing Law. This Agreement shall be construed and interpreted in accordance with the internal law of the State of Maryland, excluding its conflict of laws rules

10.4 Jurisdiction and Venue. Any suit involving any dispute or matter arising under this Agreement may only be brought in the United States District Court for the District of Maryland or any Maryland State Court having jurisdiction over the subject matter of the dispute or matter. All Members hereby consent to the exercise of personal jurisdiction by any such court with respect to any such proceeding.

10.5 WAIVER OF RIGHT TO JURY TRIAL. TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, AND AS SEPARATELY BARGAINED-FOR CONSIDERATION, THE COMPANY AND EACH INTEREST HOLDER HEREBY WAIVES ANY RIGHT TO TRIAL BY JURY IN ANY ACTION, SUIT, PROCEEDING, OR COUNTERCLAIM OF ANY KIND ARISING OUT OF OR RELATING TO THIS AGREEMENT.

10.6 Specific Performance. The parties recognize that irreparable injury will result from a breach of any provision of this Agreement and that money damages will be inadequate to fully remedy the injury. Accordingly, in the event of a breach or threatened breach of one or more of the provisions of this Agreement, any party who may be injured (in addition to any other remedies which may be available to that party) shall be entitled to one or more preliminary or permanent orders (i) restraining and enjoining any act which would constitute a breach or (ii) compelling the performance of any obligation which, if not performed, would constitute a breach.

10.7 Complete Agreement. This Agreement, including its Exhibits, and the subscription agreements referenced in the recitals hereto, constitute the complete and exclusive statement of the agreement among the Members with respect to the subject matter hereof, and supersede all prior written and oral statements, including any prior representation, statement, condition, or warranty, with respect to such subject matter.

10.8 Headings and Construction. No rule of construction will be applied to the disadvantage of a party because that party was responsible for the preparation of this Agreement or any part hereof. The Article and Section headings in this Agreement are for convenient reference only, and will be given no substantive or interpretive effect. With respect to all terms used in this Agreement, words used in the singular include the plural and words used in the plural include the singular. The word “including” means “including, without limitation,” and the words “herein”, “hereby”, “hereto” and “hereunder” refer to this Agreement as a whole. Unless the context otherwise requires, references herein: (i) to Articles, Sections and Exhibits mean the Articles and Sections of and the Exhibits attached to this Agreement; (ii) to an agreement, instrument or other document means such agreement, instrument or other document as amended, supplemented and modified from time to time, to the extent provided by the provisions thereof and by this Agreement; and (iii) to a statute or a regulation mean such statute or regulation as amended from time to time.

10.9 Binding Provisions. This Agreement is binding upon, and inures to the benefit of, the parties hereto and their respective heirs, executors, administrators, personal and legal representatives, successors, and permitted assigns.

10.10 Separability of Provisions. Each provision of this Agreement shall be considered separable; and if, for any reason, any provision or provisions herein are determined to be invalid and contrary to any existing or future law, such invalidity shall not impair the operation of or affect those portions of this Agreement which are valid.

10.11 Counterparts. This Agreement may be executed simultaneously in two or more counterparts each of which shall be deemed an original, and all of which, when taken together,

constitute one and the same document. The signature of any party to any counterpart shall be deemed a signature to, and may be appended to, any other counterpart.

10.12 No Third Party Beneficiaries. It is expressly understood that the provisions of this Agreement do not impart enforceable rights in anyone who is not a party or a successor or permitted assign of a party hereto.

IN WITNESS WHEREOF, the parties have executed, or caused this Agreement to be executed, under seal, as of the date set forth hereinabove.

WITNESS:

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University Park Community Solar LLC
Operating Agreement
Exhibit A
Defined Terms

"Act" means the Maryland Limited Liability Company Act, as amended from time to time.

"Adjusted Capital Account Deficit" means, with respect to any Interest Holder, the deficit balance, if any, in the Interest Holder's Capital Account as of the end of the relevant taxable year, after giving effect to the following adjustments:

(i) deficit shall be decreased by the amounts which the Interest Holder is deemed obligated to restore pursuant to Regulation Sections 1.704-2(g)(1) and (i)(5) (i.e., the Interest Holder's share of Minimum Gain and Member Minimum Gain); and

(ii) the deficit shall be increased by the items described in Regulation Section 1.704-1(b)(2)(ii)(d)(4), (5), and (6).

"Affiliate" means, with respect to a specified Person, any other Person that, directly or indirectly through one or more intermediaries, controls, is controlled by or is under common control with the Person specified. For purposes of this Agreement, the term "control" (including its correlative meanings, "controlled by" and "under common control with") shall mean possession, directly or indirectly, of the power to direct or cause the direction of management or policies (whether through ownership of securities or partnership or other ownership interests, by contract or otherwise).

"Agreement" means the Operating Agreement of the Company, as amended from time to time.

"Allocation Year" means (i) the period commencing on the date of this Agreement and ending on December 31, 2010, (ii) any subsequent twelve (12) month period commencing on January 1 and ending on December 31, (iii) any portion of the periods described in clause (i) or (ii) for which the Company is required to allocate Profits, Losses, and other items of Company income, gain, loss, deduction, or credit pursuant to Article 5 or 8, or (iv) for the final Allocation Year, the period commencing on the day after the end of the previous Allocation Year and ending on the date of liquidation of the Company.

"Applicable Law" means any statute, law, ordinance, executive order, rule, or regulation (including a regulation that has been formally promulgated in a rule making proceeding but, pending final adoption, is in proposed or temporary form having force of law); guideline, or notice having force of law; or approval, permit, license, franchise, judgment, order, decree, injunction, or writ of any Governmental Authority applicable to a specified Person or specified property, as in effect from time to time.

"Articles of Organization" means the Articles of Organization of the Company prepared, executed and filed with SDAT on April 3, 2009, as amended by Articles of Amendment executed and filed with SDAT on March 17, 2010.

"Capital Account" means, with respect to any Member, the Capital Account maintained for such Member in accordance with Regulations Section 1.704-1(b)(2)(iv), which includes, among other things, the following rules:

(i) To each Member's Capital Account there shall be credited (A) such Member's Capital Contribution, (B) such Member's distributive share of Profits allocated pursuant to Section 5.1 and any items in the nature of income or gain that are specially allocated to such Member pursuant to Section 5.2 or Section 5.3, and (C) the amount of any Company liabilities assumed by such Member or that are secured by any property distributed to such Member;

(ii) To each Member's Capital Account there shall be debited (A) the amount of money and the Gross Asset Value of any property distributed to such Member pursuant to any provision of this Agreement, (B) such Member's distributive share of Losses allocated pursuant to Section 5.1 and any items in the nature of expenses or losses that are specially allocated to such Member pursuant to Section 5.2 or Section 5.3, and (C) the amount of any liabilities of such Member assumed by the Company or that are secured by any property contributed by such Member to the Company;

(iii) In the event Membership Interests (or any portions thereof) are transferred in accordance with the terms of this Agreement, the transferee shall succeed to the Capital Account of the transferor to the extent it relates to the transferred Membership Interests (or portions thereof); and

(iv) In determining the amount of any liability for purposes of subparagraphs (i) and (ii) above there shall be taken into account Code Section 752(c) and any other applicable provisions of the Code and Regulations.

The foregoing provisions and the other provisions of this Agreement relating to the maintenance of Capital Accounts are intended to comply with Regulations Section 1.704-1(b) and shall be interpreted and applied in a manner consistent with such Regulations. In the event the Members Committee shall determine that it is prudent to modify the manner in which the Capital Accounts are maintained, or any debits or credits thereto (including, without limitation, debits or credits relating to liabilities that are secured by contributed or distributed property or that are assumed by the Company or any Members), the Members Committee may make such modification, provided that it is not likely to have a material effect on the amounts distributed to any Person pursuant to Article 8 upon the liquidation of the Company. The Management Committee also shall (a) make any adjustments that are necessary or appropriate to maintain equality between the Capital Accounts of the Members and the amount of capital reflected on the Company's balance sheet, as computed for book purposes, in accordance with Regulations Section 1.704-1(b)(2)(iv)(q) and (b) make any appropriate modifications if unanticipated events might otherwise cause this Agreement not to comply with Regulations Section 1.704-1(b).

"Capital Contribution" means the total amount of cash and the fair market value of any other assets contributed (or deemed contributed under Regulation Section 1.704-1(b)(2)(iv)(d)) to the Company by a Member, net of liabilities assumed or to which the assets are subject.

"Cash Flow" means all cash funds derived from operations of the Company (including interest received on reserves), without reduction for any noncash charges, but less cash funds used to pay current operating expenses and to pay or establish reasonable reserves for future expenses, debt payments, capital improvements, and replacements as determined by the Members. Cash Flow shall be increased by the reduction of any reserve previously established.

"Company Assets" means all direct and indirect interests in real and personal property owned by the Company from time to time, and shall include both tangible and intangible property (including cash).

"Company Minimum Gain" has the same meaning as the term "partnership minimum gain" in Regulations Sections 1.704-2(b)(2) and 1.704-2(d).

"Conditions of Transfer" has the meaning set forth in Section 7.1 of the Agreement.

"Contract" means any agreement, contract, understanding, lease, sublease, easement, license, obligation, promise, or undertaking (whether written or oral and whether express or implied) that is legally binding, including any responses to request for proposals, applications for permits, approvals and licenses, any binding or non-binding letter of intent, memorandum of understanding or letter of intent and any and all change orders and amendments to the foregoing.

"Member" means each Person signing this Agreement as a Member and each Person who subsequently is admitted as a Member.

"Code" means the Internal Revenue Code of 1986, as amended, or any corresponding provision of any succeeding law.

"Company" means the limited liability company organized in accordance with the Agreement.

"Depreciation" means, for each Allocation Year, an amount equal to the federal income tax depreciation, amortization, or other cost recovery deduction allowable with respect to an asset for such Allocation Year, except that (i) with respect to any asset the Gross Asset Value of which differs from its adjusted tax basis for federal income tax purposes, which difference is being eliminated by use of the "remedial method" pursuant to Regulations Section 1.704-3(d), Depreciation for such year shall be the amount of book basis recovered for such Allocation Year under the rules prescribed by Regulations Section 1.704-3(d)(2), and (ii) with respect to any other asset the Gross Asset Value of which differs from its adjusted basis for federal income tax purposes at the beginning of such Allocation Year, Depreciation shall be an amount that bears the same ratio to such beginning Gross Asset Value as the federal income tax depreciation, amortization, or other cost recovery deduction for such Allocation Year bears to such beginning adjusted tax basis; provided, however, that if the adjusted basis for federal income tax purposes of an asset at the beginning of such Allocation Year is zero, Depreciation shall be determined with reference to such beginning Gross Asset Value using any reasonable method selected by the

Members Committee. Any such calculation of Depreciation shall be in accordance with and as allowed under the Company's FERC tariff rate.

"Free Transfer Period" has the meaning set forth in Section 7.1 of the Agreement.

"Governmental Authority" means any national, state, District of Columbia or local government, any political subdivision thereof or any other governmental, quasi-governmental, judicial, public or statutory instrumentality, authority, body, agency, department, bureau, commission or entity, or any arbitrator with authority to bind a party at law.

"Gross Asset Value" means with respect to any asset, the asset's adjusted basis for federal income tax purposes, except as follows:

(i) The Gross Asset Values of all Company assets shall be adjusted to equal their respective gross fair market values (taking Code Section 7701(g) into account), as determined by the Management Committee, as of the following times: (A) the acquisition of an additional interest in the Company by any new or existing Member in exchange for more than a de minimis Capital Contribution; (B) the distribution by the Company to a Member of more than a de minimis amount of Company property as consideration for an interest in the Company; (C) the liquidation of the Company within the meaning of Regulations Section 1.704-1(b)(2)(ii)(g); and (D) at such other times described in Regulations Section 1.704-1(b)(2)(iv)(f)(5); provided that an adjustment described in clauses (A), (B), and (D) of this paragraph shall be made only if the Management Committee reasonably determines that such adjustment is necessary to reflect the relative economic interests of the Members in the Company;

(ii) The Gross Asset Value of any item of Company assets distributed to any Member shall be adjusted to equal the gross fair market value of such asset on the date of distribution as determined by the Management Committee; and

(iii) The Gross Asset Values of Company assets shall be increased (or decreased) to reflect any adjustments to the adjusted basis of such assets pursuant to Code Section 734(b) or Code Section 743(b), but only to the extent that such adjustments are taken into account in determining Capital Accounts pursuant to (A) Regulations Section 1.704-1(b)(2)(iv)(m) and (B) subparagraph (vi) of the definition of "Profits" and "Losses" or Section 5.2(g); provided, however, that Gross Asset Values shall not be adjusted pursuant to this subparagraph (iv) to the extent that an adjustment pursuant to subparagraph (ii) is required in connection with a transaction that would otherwise result in an adjustment pursuant to this subparagraph (iv).

If the Gross Asset Value of an asset has been determined or adjusted pursuant to subparagraph (i), (ii), or (iv), such Gross Asset Value shall thereafter be adjusted by the Depreciation taken into account with respect to such asset, for purposes of computing Profits and Losses.

"Interest" means a Person's share of the Profits, Losses and receipts from grants of, and the right to receive distributions from, the Company.

"Interest Holder" means any Person who holds an Interest, whether as a Member or as an unadmitted assignee of a Member.

"Involuntary Withdrawal" means, with respect to any Member, the occurrence of any of the events set forth in Act Section 4A-606(3) through (9).

"Lien" means any lien, mortgage, pledge, security interest, charge or encumbrance of any kind (including any conditional sale or other title retention agreement, any lease in the nature thereof, and any agreement to give any lien or security interest).

"Management Committee" has the meanings set forth in Section 6.5 of the Agreement.

"Member Minimum Gain" has the meaning set forth in Regulation Section 1.704-2(i) for "partner nonrecourse debt minimum gain."

"Member Nonrecourse Debt" has the same meaning as the term "partner nonrecourse debt" in Regulations Section 1.704-2(b)(4).

"Member Nonrecourse Debt Minimum Gain" means an amount, with respect to each Member Nonrecourse Debt, equal to the Company Minimum Gain that would result if such Member Nonrecourse Debt were treated as a Nonrecourse Liability, determined in accordance with Regulations Section 1.704-2(i)(3).

"Member Nonrecourse Deductions" has the same meaning as the term "partner nonrecourse deductions" in Regulations Sections 1.704-2(i)(1) and 1.704-2(i)(2).

"Membership Rights" means all of the rights of a Member in the Company, including a Member's: (i) Interest, (ii) right to inspect the Company's books and records, and (iii) right to participate in the management of and vote on matters coming before the Company.

"Minimum Gain" has the meaning set forth in Regulation Section 1.704-2(d). Minimum Gain shall be computed separately for each Interest Holder in a manner consistent with the Regulations under Code Section 704(b).

"Offer" has the meaning set forth in Section 7.1 of the Agreement.

"Offer Period" has the meaning set forth in Section 7.1 of the Agreement.

"Offeree Notice" has the meaning set forth in Section 7.1 of the Agreement.

"Percentage Interest" means, with respect to each Member, the percentage set forth opposite such Member's name on Exhibit B, as such percentage interest may be adjusted in accordance with the terms hereof from time to time.

"Person" means and includes an individual, corporation, partnership, association, limited liability company, trust, estate, or other entity.

"Profit" and "Loss" means, for each taxable year of the Company (or other period for which Profit or Loss must be computed), the Company's taxable income or loss determined in accordance with Code Section 703(a), with the following adjustments:

(iv) all items of income, gain, loss, deduction, or credit required to be stated separately pursuant to Code Section 703(a)(1) shall be included in computing taxable income or loss;

(v) any tax-exempt income of the Company, not otherwise taken into account in computing Profit or Loss, shall be included in computing taxable income or loss;

(vi) any expenditures of the Company described in Code Section 705(a)(2)(B) (or treated as such pursuant to Regulation Section 1.704-1(b)(2)(iv)(i)) and not otherwise taken into account in computing Profit or Loss, shall be subtracted from taxable income or loss;

(vii) gain or loss resulting from any taxable disposition of Company property shall be computed by reference to the adjusted book value of the property disposed of, notwithstanding the fact that the adjusted book value differs from the adjusted basis of the property for federal income tax purposes;

(viii) in lieu of the depreciation, amortization, or cost recovery deductions allowable in computing taxable income or loss, there shall be taken into account the depreciation computed based upon the adjusted book value of the asset; and

(ix) notwithstanding any other provision of this definition, any items which are specially allocated pursuant to Section 5.3 of the Agreement shall not be taken into account in computing Profit or Loss.

"Regulation" means the income tax regulations, including any temporary regulations, from time to time promulgated under the Code.

"Regulatory Allocations" has the meaning set forth in Section 5.3 of the Agreement.

"Representative" has the meaning set forth in Section 6.5 of the Agreement

"SDAT" means the State Department of Assessments and Taxation of Maryland.

"Tax Matters Partner" means the Member designated as Tax Matters Partner pursuant to this Agreement.

"Transfer" means, when used as a noun, any voluntary sale, hypothecation, pledge, assignment, attachment, or other transfer, and, when used as a verb, means voluntarily to sell, hypothecate, pledge, assign, or otherwise transfer.

"Transfer Closing Date" has the meaning set forth in Section 7.1 of the Agreement.

"Transfer Notice" has the meaning set forth in Section 7.1 of the Agreement.

"Transfer Purchase Price" has the meaning set forth in Section 7.1 of the Agreement.

"Transferee" has the meaning set forth in Section 7.1 of the Agreement.

"Transferee Offer" has the meaning set forth in Section 7.1 of the Agreement.

"Transferor" has the meaning set forth in Section 7.1 of the Agreement.

"Transferor Interest" has the meaning set forth in Section 7.1 of the Agreement.

"Voluntary Withdrawal" means a Member's dissociation with the Company by means other than a Transfer or an Involuntary Withdrawal.

List of Members and Capital

[illegible]

Sample Contract Documents

Participant Agreement and Investor Questionnaire

UNIVERSITY PARK COMMUNITY SOLAR LLC

Limited Liability Company Interests

Subscription Agreement

UNIVERSITY PARK COMMUNITY SOLAR LLC

This Subscription Agreement (this “Agreement”) is entered into between University Park Community Solar LLC, a Maryland limited liability company (the “Company”), and the undersigned “Investor” (in the case of a subscription for the account of a trust or other entity, such term shall refer to the trustee, fiduciary or representative making the investment decision and executing this Agreement, or the trust or other entity, or both, as appropriate, on behalf of the beneficial holders of the interests in such account), wherein each respective party hereby agree as follows:

1. Sale and Purchase of an Interest. The Company has been formed under the laws of the State of Maryland, and from and after the Closing (as defined below) will be governed by an Operating Agreement the execution version of which has been furnished to the Investor (as the same may be modified from time to time, the “Operating Agreement”).

Subject to the terms hereof and in reliance upon the representations and warranties of the respective parties contained herein, (a) the Company agrees to sell to the Investor and the Investor irrevocably subscribes for and agrees to purchase from the Company an interest as a member in the Company (an “Interest”) for an amount equal to the amount set forth above the Investor’s signature at the end of this Agreement, (b) the Investor agrees to become a member of the Company (a “Member”) and to be bound by the terms and provisions of the Operating Agreement and this Agreement and (c) the Company agrees that the Investor shall be admitted as a Member, in each case on the Closing Date (as defined below). Subject to the terms hereof and of the Operating Agreement, the Investor’s obligation to pay for the Interest being purchased by the Investor hereunder shall be unconditional, complete and binding upon the completion of the Closing (as defined below).

2. Other Subscription Agreements. The Company has entered into or expects to enter into separate subscription agreements (the “Other Subscription Agreements”) and, together with this Agreement, the “Subscription Agreements”) with other investors (the “Other Investors”), providing for the sale to the Other Investors of Interests and the admission of the Other Investors as Members at the Closing or at other closings. This Agreement and the Other Subscription Agreements are separate agreements, and the sales of Interests to the Investor and the Other Investors are separate sales.

3. Closing. The closing of the sale to the Investor, and the subscription for and purchase by the Investor, of an Interest as provided for in Section 1 hereof, and the admission of the Investor as a Member (the “Closing”), shall take place at the offices of the Company, on the date that this Agreement along with the Investor Questionnaire attached hereto as Annex A (both of which having been completed and signed by the Investor) have been accepted by the Company (the date of such acceptance, being

hereinafter referred to as the “Closing Date”). On the Closing Date, the Company will list the Investor as a Member on the register of the Company.

4. Representations, Warranties and Covenants of the Company. The Company represents, warrants and covenants to the Investor, in each case as of the date that this Agreement is effective, as of the Closing Date, and on the subsequent dates specified below (as and to the extent specified below) that:

4.1 Formation and Standing. The Company is duly formed and validly existing and in good standing as a limited liability company under the laws of the State of Maryland, and has all requisite power and authority to carry on its business as now conducted and as proposed to be conducted as described in the Operating Agreement.

4.2 Disclosure. The information attached hereto as Annex B is true and accurate in all material respects.

4.3 Proceeds. The Company covenants that it is trying to raise \$130,000 and until it receives fully executed Subscription Agreements for and along with such amount, it shall hold all amounts received in escrow in a bank or other depository institution, the deposits of which are insured by the Federal Deposit Insurance Corporation. The Closing under this Agreement shall happen simultaneously with the Closing under each of the Other Subscription Agreements.

4.4 Authorization of Agreement, etc. The execution, delivery and performance by the Company of this Agreement have been authorized by all necessary action on behalf of the Company, and this Agreement is a legal, valid and binding agreement of the Company, enforceable against the Company in accordance with its terms.

4.5 Compliance with Laws and Other Instruments. The execution and delivery of this Agreement by the Company, the performance by the Company of its obligations under this Agreement and the Other Subscription Agreements and the consummation by the Company of the transactions contemplated hereby will not conflict with or result in any violation of or default under any provision of the Operating Agreement, or any agreement or other instrument to which the Company is a party or by which it or any of its properties are bound, or any permit, franchise, judgment, decree, statute, order, rule or regulation applicable to the Company or its business or properties.

4.6 Offer of Interests. Neither the Company nor anyone acting on its behalf has taken or will take any action that would (i) subject the offer, issuance or sale of the Interests to the registration requirements of the Securities Act or (ii)

require the Company to register as an “investment company” under the U.S. Investment Company Act of 1940, as amended (the “Investment Company Act”).

5. Representations, Warranties and Covenants. The Investor represents, warrants and covenants to the Company, in each case as of the date that this Agreement is effective, as of the Closing Date, and on the subsequent dates specified below (as and to the extent specified below) that:

5.1 Authorization of Purchase, etc. The Investor is an individual or an entity of the kind set forth below its signature on the signature pages hereof and is duly organized, formed or incorporated, as the case may be, and validly existing and in good standing, under the laws of the Investor’s jurisdiction of organization, formation or incorporation set forth below its signature on the signature pages hereof, and the Investor has all requisite power and authority to execute, deliver and perform the Investor’s obligations under this Agreement and the Operating Agreement, and to subscribe for and purchase an Interest hereunder. The purchase by the Investor of an Interest and the Investor’s execution, delivery and performance of this Agreement and the Operating Agreement have been authorized by all necessary corporate or other action by the Investor, and this Agreement and the Operating Agreement are the Investor’s legal, valid and binding obligations, enforceable against the Investor in accordance with their respective terms.

5.2 Compliance with Laws and Other Instruments. The execution and delivery of this Agreement and the Operating Agreement, the consummation of the transactions contemplated hereby and thereby, and the performance of the Investor’s obligations hereunder and thereunder do not and will not conflict with, or result in any violation of or default under, any provision of any certificate of incorporation, memorandum and articles of association, by-laws, trust agreement, partnership agreement or other organizational or governing instrument applicable to the Investor, or any agreement or other instrument to which the Investor is a party or by which the Investor or any of the Investor’s properties are bound, or any permit, franchise, judgment, decree, statute, order, rule or regulation applicable to the Investor or to the Investor’s business or properties.

5.3 This Agreement, etc. The Investor has been furnished with a copy of this Agreement and the Operating Agreement. The Investor has reviewed such documents and the Investor understands the risks of, and other considerations relating to, the purchase of an Interest, including the risks and conflicts of interests related thereto and the effects relating to members that default on their obligations to make capital contributions to the Company.

5.4 Access to Information. The Investor has been provided an opportunity to ask questions of, and the Investor has received answers thereto satisfactory to the Investor from, the Company and its representatives regarding

the terms and conditions of this Agreement, and the Investor has obtained any and all additional information requested by the Investor of the Company and its representatives to verify the accuracy of all information furnished to the Investor regarding this Agreement. The Investor is not relying on the Company, or any of their respective members, officers, counsel, agents or representatives for legal, investment or tax advice. The Investor has sought independent legal, investment and tax advice to the extent that the Investor has deemed necessary or appropriate in connection with the Investor's decision to subscribe for an Interest.

5.5 Evaluation of and Ability to Bear Risks. The Investor has such knowledge and experience in financial and business affairs that the Investor is capable of evaluating the merits and risks of purchasing, and other considerations relating to, the Interest to be purchased by the Investor pursuant to this Agreement, and the Investor has not relied in connection with the Investor's purchase of an Interest upon any representations, warranties or agreements other than those set forth in this Agreement, and the Operating Agreement. The Investor's financial situation is such that the Investor can bear the economic risk of holding the Interest for an indefinite period of time, and the Investor can suffer the complete loss of the Investor's Interest.

5.6 Purchase for Investment. The Investor is acquiring the Interest for the Investor's own account as principal for investment and is not acquiring the Interest with a view to or for sale in connection with any distribution of all or any part of such Interest. The Investor will not, directly or indirectly, transfer all or any part of such Interest (or solicit any offers to buy, purchase or otherwise acquire or take a pledge of all or any part of such Interest) except in accordance with (a) the registration provisions of the Securities Act or an exemption from such registration provisions, (b) any applicable state or non-U.S. securities laws and (c) the terms of the Operating Agreement. The Investor understands that the Investor must bear the economic risk of the Investor's investment in an Interest for an indefinite period of time because, among other reasons, the offering and sale of the Interests have not been registered under the Securities Act or the Maryland Securities Act or the securities laws of any other state and, therefore, the Interests cannot be sold other than through a privately negotiated transaction unless they are subsequently registered under the Securities Act or the Maryland Securities Act or the securities laws of any other state or an exemption from such registration is available. The Investor also understands that transfers of the Interests are further restricted by the provisions of the Operating Agreement, and may be restricted by applicable state and non-U.S. securities laws, and that no market exists or is expected to develop for the Interests.

5.7 Correctness of Information. All information furnished by the Investor on the signature pages hereof, in the Investor Questionnaire attached hereto as Annex A, and in any U.S. Internal Revenue Service or other tax form

delivered to the Company is or will be (as of the date of delivery) true and complete. The Investor has delivered true and complete (as of the date of delivery) copies of the following organizational and authorization documents: (a) all organizational documents of the Investor, (b) all documents authorizing the Investor to acquire an Interest in the Company and (c) evidence of the authority of each person executing the documents referred to in Section 5.7(b) to act on behalf of the Investor. In the event any information required to be furnished by the Investor pursuant to this Agreement is no longer correct as of any date, the Investor hereby agrees to provide the Company with a written update of such information.

5.8 Reaffirmation; Notification. Without limiting the foregoing, the Investor agrees to give the Company prompt written notice in the event that any of the representations and warranties of the Investor contained in this Section 5 ceases to be true at any time following the date hereof. The Investor hereby acknowledges and agrees that the Company is authorized to redeem the Interest of the Investor, including any right to future distributions of the Company.

5.9 Withdrawal. The Investor acknowledges and agrees that the Investor will have no right to withdraw from the Company except as may be expressly set forth in the Operating Agreement.

6. Amendments and Waivers. This Agreement may be amended and the observance of any provision hereof may be waived (either generally or in a particular instance and either retroactively or prospectively) only with the written consent of the Investor and the Company).

7. Survival of Representations and Warranties. All representations, warranties and covenants contained herein or made in writing by the Investor or by or on behalf of the Company in connection with the transactions contemplated by this Agreement shall survive the execution and delivery of this Agreement, any investigation at any time made by or on behalf of the Company or the Investor, the issue and sale of Interests and the dissolution of the Company, without limitation as to time.

8. Indemnification. The Investor understands that if the Company, any Other Investor or any of their respective members, officers, directors, employees, representatives or agents (the “Indemnified Parties”) becomes involved in any capacity in any action, proceeding, or investigation brought by or against any person (including the Investor) arising out of or based upon any false representation or warranty or breach or failure by such Investor to comply with any covenant or agreement made by it in this Agreement or in any other document furnished by it to any of the foregoing in connection with this transaction, it will periodically reimburse the Indemnified Parties for their legal and other expenses (including the cost of any investigation and preparation) incurred in connection therewith. The Investor also will indemnify the Indemnified Parties against any losses, claims, damages, or liabilities to which any of them may become subject in

connection with any such matter. If for any reason (other than the willful misfeasance, gross negligence, or bad faith of, the Indemnified Party or Parties seeking indemnification) the foregoing indemnification is unavailable to the Indemnified Parties, or is insufficient to hold them harmless, then it shall contribute to the amount paid or payable by the Indemnified Parties, as applicable, as a result of such loss, claim, damage, or liability in such proportion as is appropriate to reflect not only the relative benefits received by the Investor on the one hand and the Indemnified Parties on the other, but also the relative fault of the Investor and the relevant Indemnified Party, as applicable, as well as any relevant equitable considerations. The reimbursement, indemnity, and contribution obligations of the Investor under this paragraph shall be in addition to any liability which the Investor may otherwise have, shall extend upon the same terms and conditions to the respective officers, directors, managing directors, stockholders, employees or controlling persons of the Indemnified Parties, and shall be binding upon and inure to the benefit of any successors, assigns, heirs, and personal representatives of Indemnified Parties and any such persons. In addition to any other remedies the persons and entities indemnified hereunder may have, any amount payable by the Investor pursuant to this Section 8 may be offset against amounts payable by the Company to it.

9. Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of and be enforceable by the respective successors and permitted assigns of the parties hereto.

10. Notices. Each notice relating to this Agreement shall be in writing and shall be delivered (a) in person, by registered or certified mail or by private courier or (b) by facsimile, e-mail or other electronic means, with such confirmation as the Company deems appropriate under the circumstances, which may include confirmation by telephone, e-mail or other electronic means to an officer or other representative of the recipient. All notices to the Investor shall be delivered to the Investor at its last known address as set forth in the records of the Company. All notices to the Company shall be delivered to 4313 Tuckerman Street, University Park, Maryland 20782. The Investor may designate a new address for notices by giving written notice to that effect to the Company. The Company may designate a new address for notices by giving written notice to that effect to the Investor. Unless otherwise specifically provided in this Agreement, a notice given in accordance with the foregoing clause (a) shall be deemed to have been effectively given three Business Days after such notice is mailed by registered or certified mail, return receipt requested, and one Business Day after such notice is sent by Federal Express or other one-day service provider, to the proper address, or at the time delivered when delivered in person or by private courier. Any notice to the Company or to the Investor by facsimile, e-mail or other electronic means shall be deemed to have been effectively given when sent and confirmed by telephone, e-mail or other electronic means in accordance with the foregoing clause (b).

11. Governing Law; Jurisdiction; Venue; Severability. This Agreement shall be governed by and construed in accordance with the laws of the State of Maryland

without giving effect to the principles of conflict of laws thereof. If, nevertheless, it shall be determined by a court of competent jurisdiction that any provision or wording of this Agreement shall be invalid or unenforceable under applicable law, such invalidity or unenforceability shall not invalidate the entire Agreement. In that case, this Agreement shall be construed so as to limit any term or provision so as to make it enforceable or valid within the requirements of applicable law, and, in the event such term or provision cannot be so limited, this Agreement shall be construed to omit such invalid or unenforceable provision.

12. Headings, etc. The cover page, the table of contents and the headings of the sections of this Agreement are inserted for convenience only and shall not be deemed to constitute a part hereof.

13. Entire Agreement. This Agreement, the Operating Agreement and any other written agreement between the Company and each Member (including any indemnification agreement) contain the entire agreement of the parties with respect to the subject matter hereof and thereof, and there are no representations, covenants or other agreements except as set forth herein or therein.

14. Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be deemed an original and all of which taken together shall constitute one and the same instrument.

[Signature Page Follows]

IN WITNESS WHEREOF, the undersigned Company has duly executed this Subscription Agreement on the date set forth below, and this Subscription Agreement shall be and become a binding agreement between the undersigned and the Investor in accordance with the terms hereof.

AMOUNT INVESTED: US\$ [_____]

SIGNATURE FOR INDIVIDUAL SUBSCRIBER
(Signed as a deed by the Investor)

**SIGNATURE FOR COMPANY,
CORPORATION, TRUST OR OTHER
ENTITY SUBSCRIBER**
(Signed as a deed by the Investor)

(Print name of Individual Subscriber)

(Print name of Entity Subscriber)

(Signature)

(Signature)

ACCEPTANCE

[_____] /, as [_____] of the Company, hereby accepts the above subscription to acquire Interests.

Dated: _____

[_____]

By: _____
Name: [_____]
Title: [_____]

INVESTOR EXECUTION PAGE

ANNEX A

Name of Prospective Investor:_____

Email Address:_____

State of Domicile:_____

UNIVERSITY PARK COMMUNITY SOLAR LLC

INVESTOR QUESTIONNAIRE

GENERAL INSTRUCTIONS: Each purchaser of the Interests must complete this Investor Questionnaire, including **Exhibit B** attached hereto. If the Interests are being purchased by a partnership, corporation or limited liability company, each partner, shareholder or equity owner must complete this Investor Questionnaire, including **Exhibit B** attached hereto.

Please return the completed and executed Investor Questionnaire by [_____], 2010 to Andrew M. Tucker of Andrews Kurth LLP, University Park Community Solar LLC's outside legal counsel, by facsimile to (202) 662-2739.

UNIVERSITY PARK COMMUNITY SOLAR LLC

INVESTOR QUESTIONNAIRE

TO: University Park Community Solar LLC
c/o Andrew M. Tucker, Andrews Kurth LLP
1350 I Street, N.W.
Suite 1100
Washington, D.C. 20005

Gentlemen:

In connection with the purchase of interests (the “*Interests*”) as a member of University Park Community Solar LLC, a Maryland limited liability company (the “*Company*”), the undersigned hereby represents as follows:

1. **Representations as to Status.** The undersigned has read the definition of “Accredited Investor” from Rule 501 of Regulation D of the Securities Act of 1933, as amended, attached hereto as Exhibit A, and certifies that either (*check one*):

_____ The undersigned is an “Accredited Investor” and has completed the statement concerning his/her knowledge and experience in financial and business matters included in Exhibit B hereto. Please provide sufficient detail so that the Company’s legal counsel may conclude that the undersigned is capable of evaluating the merits and risks of investment in the Company; or

_____ The undersigned is not an “Accredited Investor.”

The foregoing representation is true and accurate as of the date hereof and shall be true and accurate as of the date of the sale of the Interests. **If in any respect such representation shall not be true and accurate prior to or as of such date of sale, the undersigned shall give immediate written notice of such fact to Andrew M. Tucker of Andrews Kurth LLP, the Company’s outside counsel, by facsimile to (202) 662-2739.**

Dated: _____, 2010

Very truly yours,

Print Name of Purchaser

Signature

Print Title (if applicable)

Print Name of joint investor or other person
whose signature is required

Signature

Print Title (if applicable)

EXHIBIT A

Rule 501. Definitions and Terms Used in Regulation D.

As used in Regulation D, the following terms have the meaning indicated:

(a) **Accredited Investor.** “Accredited investor” shall mean any person who comes within any of the following categories, or who the issuer reasonably believes comes within any of the following categories, at the time of the sale of the securities to that person:

- (1) Any bank as defined in section 3(a) (2) of the Act or any savings and loan association or other institution as defined in Section 3(a) (5) (A) of the Act whether acting in its individual or fiduciary capacity; any broker dealer registered pursuant to Section 15 of the Securities Exchange Act of 1934; any insurance company as defined in Section 2(13) of the Act; any investment company registered under the Investment Company Act of 1940 or a business development company as defined in Section 2(a) (48) of that Act; any Small Business Investment Company licensed by the U.S. Small Business Administration under Section 301(c) or (d) of the Small Business Investment Act of 1958; any plan established and maintained by a state, its political subdivisions, or any agency or instrumentality of a state or its political subdivisions, for the benefit of its employees, if such plan has total assets in excess of \$5,000,000; any employee benefit plan within the meaning of the Employee Retirement Income Security Act of 1974, if the investment decision is made by a plan fiduciary, as defined in Section 3(21) of such Act, which is either a bank, savings and loan association, insurance company, or registered investment adviser, or if the employee benefit plan has total assets in excess of \$5,000,000, or, if a self-directed plan, with investment decisions made solely by persons that are accredited investors;
- (2) Any private business development company as defined in Section 202(a) (22) of the Investment Advisers Act of 1940;
- (3) Any organization described in Section 501(c) (3) of the Internal Revenue Code, corporation, Massachusetts or similar business trust, or partnership, not formed for the specific purpose of acquiring the securities offered, with total assets in excess of \$5,000,000;
- (4) Any director, executive officer, or general partner of the issuer of the securities being offered or sold, or any director, executive officer, or general partner of a general partner of that issuer;
- (5) Any natural person whose individual net worth, or joint net worth with that person’s spouse, at the time of his purchase exceeds \$1,000,000;
- (6) Any natural person who had an individual income in excess of \$200,000 in each of the two most recent years or joint income with that person’s spouse in excess of \$300,000 in each of those years and has a reasonable expectation of reaching the same income level in the current year;
- (7) Any trust with total assets in excess of \$5,000,000, not formed for the specific purpose of acquiring the securities offered, whose purchase is directed by a sophisticated person as described in Rule 506(b) (2) (ii); and
- (8) Any entity in which all of the equity owners are accredited investors.

EXHIBIT B

CONFIDENTIAL SUPPLEMENTAL INFORMATION STATEMENT
(To Be Completed by Individual Purchasers as each Partner, Shareholder or Equity Owner of a Partnership, Corporation or Limited Liability Company)

In order to assure compliance with applicable federal and state laws, it is necessary to obtain information regarding the financial position and experience of individual purchasers of the Interests.

I. GENERAL INFORMATION (attach additional sheets if necessary)

A. Purchasers

1. Name: _____

2. Address: _____

Business:

Residence:

3. Telephone:

Business: (____) _____

Residence: (____) _____

4. Proposed Amount of Investment: \$ _____

5. State where registered to vote: _____

6. Social Security Number: _____

7. Date of Birth: _____

8. Country of citizenship, if other than the United States: _____

9. Marital status: _____

10. Please state your education and degrees earned:

<u>Degree</u>	<u>School</u>	<u>Year</u>

11. Current occupation (if retired, please described your last occupation):

Employer: _____

Nature of Business: _____

Position and/or duties: _____

Period Employed: _____

12. If current employment is less than five years, please complete the following chart on your employment history for the past five years:

<u>Employer and Title</u>	<u>Primary Duties</u>	<u>From</u>	<u>To</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

13. Please list all professional qualifications that you have held or currently hold, including bar admissions, accounting certificates, brokerage licenses and other professional licenses or certificates:

<u>Professional Qualifications</u>	<u>Year Received</u>	<u>Still Effective</u>	
		<i>Yes</i>	<i>No</i>
		<i>Yes</i>	<i>No</i>

II. FINANCIAL INFORMATION

- A. To confirm that each individual purchaser meets the financial requirements established for this offering, please answer the questions set forth below, as appropriate, by circling the appropriate response.

1. Please indicate your net worth (including spouse, if purchasing jointly), including home, home furnishings and automobiles:

\$ 75,000 - 150,000

\$150,000 - 250,000

\$250,000 - 500,000

\$500,000 - 1,000,000

Greater than \$1,000,000

2. Did you have income (excluding any income attributable to your spouse) in excess of \$200,000 for 2008 and 2009 and do you reasonably expect to have income in excess of \$200,000 in 2010?

Yes ☐ No

3. Did you and your spouse (if purchasing jointly) have joint income in excess of \$300,000 for 2008 and 2009 and do you reasonably expect to have joint income in excess of \$300,000 in 2010?

Yes ☐ No

4. If the purchaser is a pension plan or benefit plan, does such plan have assets greater than \$5 million?

Yes ☐ No

5. Was the purchaser organized for the specific purpose of acquiring the Interests of the Company?

Yes ☐ No

6. Is the purchaser is a partnership, corporation or limited liability company?

Yes ☐ No

If "Yes," please list on a separate page the name of each partner, shareholder or equity owner and each such individual's approximate net worth (including spouse, if applicable), including home, home furnishings and automobiles.

7. Is the purchaser a trust?

Yes ☐ No

*If "Yes," please answer the remaining parts of this Question 7.
If "No," please skip to Section III.*

- (a) Certain trusts generally may not qualify as accredited investors except under special circumstances. Therefore, if you intend to purchase the Interests in whole or in part through a trust, please answer each of the following questions.

- (1) Is the trustee of the trust a national or state bank that is acting in its fiduciary capacity in making the investment on behalf of the trust?

Yes ☐ No

- (2) Can the trust be amended or revoked at any time by its grantors?

Yes ☐ No

- (b) If the answer to Question 7(a) (2) above is "Yes," please answer the following questions relating to each grantor.

(1) Grantor: _____
(Name)

- (A) Net worth of grantor (including spouse, if applicable), including home, home furnishings and automobiles:

☐ \$ 75,000 - 150,000
☐ \$150,000 - 250,000
☐ \$250,000 - 500,000
☐ \$500,000 - 1,000,000
☐ Greater than \$1,000,000

- (B) Income (excluding any income attributable to spouse) was in excess of \$200,000 for 2008 and 2009 and is reasonably expected to be in excess of \$200,000 for 2010?

Yes ☐ No

- (C) Income (including income attributable to spouse) was in excess of \$300,000 for 2008 and 2009 and is reasonably expected to be in excess of \$300,000 for 2010?

Yes ☐ No

(2) Grantor: _____
(Name)

- (A) Net worth of grantor (including spouse, if applicable), including home, home furnishings and automobiles:

☐ \$ 75,000 - 150,000
☐ \$150,000 - 250,000
☐ \$250,000 - 500,000
☐ \$500,000 - 1,000,000
☐ Greater than \$1,000,000

- (B) Income (excluding any income attributable to spouse) was in excess of \$200,000 for 2008 and 2009 and is reasonably expected to be in excess of \$200,000 for 2010?

Yes ☐ No

- (C) Income (including income attributable to spouse) was in excess of \$300,000 for 2008 and 2009 and is reasonably expected to be in excess of \$300,000 for 2010?

Yes ☐ No

III. INVESTMENT EXPERIENCE REPRESENTATIONS

A. Indicate how often you invest in the following by circling the appropriate response:

1. Marketable Securities such as publicly traded stock or bonds, but excluding treasury, state or municipal securities

Often ☐ *Occasionally* ☐ *Seldom* ☐ *Never*

2. Nonmarketable Securities such as the Interests

Often ☐ *Occasionally* ☐ *Seldom* ☐ *Never*

3. Venture Capital Limited Partnership Companies

Often ☐ *Occasionally* ☐ *Seldom* ☐ *Never*

4. Please list below your most recent private investments (attach a separate sheet if necessary):

<u>Private Offering</u>	<u>Type of Investment</u>	<u>When Purchased</u>	<u>Amount of Investment</u>

B. Please answer each of the following questions regarding your investment experience:

1. Do you have such knowledge and experience in financial and business matters as to be capable of evaluating the merits and risks of an investment in the Company?

Yes ☐ *No*

2. Do you, either alone by reason of your business or financial experience or together with your professional advisor or advisors, have the capacity to protect your own interests in connection with a purchase of the Interests in the Company?

Yes ☐ *No*

3. Did you consult a professional advisor or advisors in evaluating your purchase of the Interests?

Yes ☐ *No*

4. If the answer to Question 3 above is "Yes," please provide name, address, phone number and qualifications of such advisor or advisors.

5. Are you (or the trust beneficiary for which you are the fiduciary) able to bear the economic risk of the investment, including a complete loss of the investment?

Yes



No

I confirm that the foregoing statements are complete and accurate to the best of my knowledge and belief, and that I undertake to notify the Company regarding any material change in the information set forth above prior to the closing of the purchase by me of the Interests.

Print Name of Purchaser

By: _____

Signature

Date

Print Title

Print Name of joint purchaser or other person whose signature is required

By: _____

Signature

Date

ANNEX B

Prospectus

University Park Community Solar LLC (LLC) is licensed in the state of Maryland for the purpose of raising the necessary funds to purchase, construct, and operate a solar electric generating facility. The facility is to be installed on the roof of the University Park Church of the Brethren and at this time will be the only facility built and operated by the LLC.

Our goal is to generate clean renewable electricity within the community and reduce our dependence on fossil fuel and nuclear generated power. We plan to share our experience and knowledge with other communities interested in becoming solar communities.

The funding source is membership interests purchased by members within the Maryland community. The LLC is a for profit company in which all profits will be passed through to the members according to their membership interest percentage with the exception of the normal operating expenses such as licensing fees, accounting expenses, office supplies and postage and other normal operating expenses. There are no paid employees or commissions.

The rights and responsibilities of members will be set forth in an operating agreement that will be approved and signed by all members. There is only one type of membership interest. Each member will have a single vote in all decision-making processes and will not be affected by the amount of a member's investment.

The LLC will generate income through the sale of electricity and the sale of Renewable Energy Certificates (REC's). Income will also come through a one time federal tax credit or grant program equal to 30% of the constructed value of the facility. We intend to opt for the grant and return the proceeds to the investors. In addition the value of facility will be depreciated over a six-year period and this credit will be passed through to the members.

You should consult your tax advisor or accountant to verify your ability to take advantage of the depreciation credit.

As an investor you can at any point prior to signing the operating agreement withdraw your investment from the LLC.

The solar panels and associated equipment are subject to the normal risks of any constructed facility or building. The LLC will carry property insurance to mitigate this risk but in the event of damage there would possibly be a loss of income while the damage was repaired.

The REC's are traded like securities and the value is dependent on the forces of supply and demand. Our financial pro-forma assumes a declining value of the REC's over time but there is the risk that the values could be less or that the REC program could be impacted by factors beyond the control of the LLC.

The income from the sale of electricity is governed by a contract between the Church of the Brethren and the LLC. There is the risk that the church could be unable to fulfill its obligation under the contract for reasons outside the control of the LLC

Business Plan

The accompanying financial analysis presents a hypothetical cash flow for the facility over a twenty-year period. These cash flows are estimates and the actual cash flows may vary. It shows that we expect to recover our full investment in 5-6 years and that the nominal annualized return on investment will be approximately 7-9%.

We urge potential members to come to study the incentive programs and cash flow assumptions on which our business plan is based. Please contact the organizing committee members to answer any questions regarding the LLC, the solar project, or your financial investment.

Sample Contract Documents

Power Purchase Agreement

POWER PURCHASE AGREEMENT

between

UNIVERSITY PARK COMMUNITY SOLAR

and

UNIVERSITY PARK CHURCH OF THE BRETHREN

Dated as of _____, 2010

TABLE OF CONTENTS

	<u>PAGE</u>
ARTICLE 1 - DEFINITIONS AND RULES OF INTERPRETATION	4
1.1 Rules of Construction	4
1.2 Definitions.....	5
ARTICLE 2 - TERM AND TERMINATION.....	8
2.1 Term.	8
2.2 Initial Period.	8
2.3 Operations Period.	8
ARTICLE 3 - FACILITY & OWNERSHIP.....	8
3.1 Commercial Operation Date	8
3.2 Facility Description.....	8
3.3 Legal Ownership.	8
3.4 Purchase Option.	9
ARTICLE 4 – CONSTRUCTION, ACCESS & OPERATION.....	9
4.1 Contracting.....	9
4.2 Permitting.	9
4.3 Seller & Installer Access.	9
4.4 Time of Work.	9
4.5 Security.	9
4.6 Site Modification.	9
4.7 Emergency Repairs.	9
4.8 Maintenance Shutdowns.	9
4.9 Site Condition Shutdowns.....	9
4.10 Host Shutdown.	10
ARTICLE 5 – PURCHASE & SALE OF ELECTRICITY	10
5.1 Electricity Purchase.	10
5.2 Annual Purchase True-Up.....	10
5.3 Net Metering.	10
5.4 Supplemental Energy.	11
ARTICLE 6 – ELECTRICITY PURCHASE PRICE.....	11
6.1 Rate Schedule.	11
6.2 Rate Cap.	11
ARTICLE 7 - BILLING AND PAYMENT	11
7.1 Billing Invoices.....	11
7.2 Payments	11
7.3 Account Information.....	11
7.4 Records; Auditing.	12

ARTICLE 8 – SUPPLEMENTAL POWER, NET METERING, SRECS	12
8.1 Excess Needs.	12
8.2 Incentives.	12
8.3 SRECS.	12
8.4 Capacity.	12
8.5 Required Information.	12
ARTICLE 9 - HOST PURCHASE OPTION	12
9.1 Purchase Option.	12
9.2 Appraisal.	12
ARTICLE 10 - CLOSURE OF PREMISES	13
ARTICLE 11 - SALE OF SITE, DISBANDMENT OF HOST	13
11.1 Sale of Site.	13
11.2 Church House Sale.....	13
11.3 Disbandment or Dissolution of Host.	13
ARTICLE 12 – DECOMMISSIONING & REMOVAL.....	13
ARTICLE 13 – PERMITS & APPROVALS	14
13.1 Consents & Approvals.	14
13.2 Government Approvals.	14
13.3 Host Consents.	14
ARTICLE 14 – TAXES.....	14
14.1 Facility Tax Liabilities.	14
14.2 Facility Tax Assets.	14
14.3 Taxes on Electricity.	14
14.4 Ad Valorem & Property Taxes.	14
ARTICLE 15 – INSURANCE.....	14
15.1 Insurance Requirements.	14
ARTICLE 16 – INDEMNIFICATION.....	15
ARTICLE 17 – LIMITATION ON DAMAGES.....	15
ARTICLE 18 – DISPUTE RESOLUTION	15
18.1 Dispute Negotiation.	15
18.2 Non-Binding Mediation.	15
18.3 Arbitration.	15
ARTICLE 19 – REPRESENTATIONS AND WARRANTIES.....	16
19.1 Mutual Representations and Warranties.	16
ARTICLE 20 - DELIVERY AND METERING.....	17
20.1 Delivery.....	17

20.2	Title and Risk of Loss	17
20.3	Metering.....	17
20.4	Annual Testing.....	17
20.5	Additional Testing.	17
ARTICLE 21 - DEFAULT AND REMEDIES		17
21.1	Events of Default.	17
21.2	Damages and Termination	18
21.3	Waiver and Exclusion of Other Damages.....	18
21.4	Duty to Mitigate.....	18
ARTICLE 22 – FORCE MAJEURE		18
22.1	Definition of Force Majeure.	18
ARTICLE 23 – NOTICES.....		18
ARTICLE 24 – MISCELLANEOUS		19
24.1	Change of Law	19
24.2	Continuing Effect.	19
24.3	Governing Law.	19
24.4	Assignment.	19
24.5	Waiver.....	20
24.6	Relationship of the Parties	20
24.7	Severability	20
24.8	Complete Agreement; Amendments.....	20
24.9	Headings	20
24.10	Counterparts.....	20

Exhibits.

This Agreement includes the following Exhibits, which are specifically incorporated herein and made a part of this Agreement.

Exhibit A	Solar Energy rates applicable in each contract year
Exhibit B	Description of the Site, Premises and the Facility
Exhibit C	Insurance Policy
Exhibit D	Contract between Standard Solar and UPCS w/invoice
Exhibit E	Operating Agreement of Seller LLC
Exhibit F	Bylaws of University Park Church of the Brethren (Host)
Exhibit G	Operations and Maintenance Service Plan

SOLAR POWER PURCHASE AGREEMENT

PREAMBLE:

We, the University Park Community Solar LLC and the University Park Church of the Brethren, do hereby enter into this solar power purchase agreement in order to further the development of solar electric energy generating capacity in our community and to demonstrate the financial practicality and systems feasibility of a model through which private citizens and private organizations, even on a small scale, may join to this end.

This Solar Power Purchase Agreement (this “Agreement”) is made and entered into as of this _____ day of _____, 2010 (the “Effective Date”) between University Park Community Solar (“Seller”), a Maryland limited liability company, and University Park Church of the Brethren (“Host”), a Religious NPO incorporated under the laws of the State of Maryland. (each a “Party” and together, the “Parties”).

WITNESSETH:

WHEREAS, Host desires that Seller install, maintain and operate a solar electric generating facility with an aggregate nameplate capacity of approximately 21.9 kilowatt (kW) – DC, 19.0 kW – AC, and with an expected annual output of 30,443 kilowatt hours (the “Facility”) on the rooftop of Host’s property located at 4413 Tuckerman Street, University Park, MD 20782 (the “Site”) and sell electric energy produced by the Facility and utilized by the Host; and

WHEREAS, Seller desires to sell, and Host desires to purchase, the solar energy from the Facility (as more particularly defined herein) for the Site, consisting of Metered monthly production of energy from the Facility pursuant to the terms and conditions set forth herein;

NOW THEREFORE, in consideration of the mutual promises set forth below, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

ARTICLE 1 - DEFINITIONS AND RULES OF INTERPRETATION

1.1 Rules of Construction. The capitalized terms listed in this Article 1 shall have the meanings set forth herein whenever the terms appear in this Agreement, whether in the singular or the plural or in the present or past tense. In addition, the following rules of interpretation shall apply:

(A) The masculine shall include the feminine and neuter.

(B) The words “hereof”, “herein”, and “hereunder” and words of similar import shall refer to this Agreement as a whole and not to any particular provision of this Agreement.

(C) References to “Articles,” “Sections,” or “Exhibits” shall be to articles, sections, or exhibits of this Agreement.

(D) The Exhibits attached hereto are incorporated in and are intended to be a part of this Agreement; *provided*, that in the event of a conflict between the terms of any Exhibit and the terms of this Agreement, the terms of this Agreement shall take precedence.

(E) This Agreement was negotiated and prepared by both Parties with the advice and participation of counsel for Host. The Parties have agreed to the wording of this Agreement and none of the provisions hereof shall be construed against one Party on the ground that such Party is the author of this Agreement or any part hereof.

(F) The Parties shall act reasonably and in accordance with the principles of good faith and fair dealing in the performance of this Agreement.

(G) Use of the words “include” or “including” or similar words shall be interpreted as “include without limitation” or “including, without limitation”.

(H) References to any statute, code or statutory provision are to be construed as a reference to the same as it may have been, or may from time to time be, amended, modified or reenacted, and include references to all bylaws, instruments, orders and regulations for the time being made thereunder or deriving validity therefrom unless the context otherwise requires.

(I) In the event of a conflict, a mathematical formula describing a concept or defining a term shall prevail over words describing a concept or defining a term.

(J) References to any amount of money shall mean a reference to the amount in United States Dollars.

1.2 Definitions. The following terms shall have the meanings set forth herein:

“**Agreement**” means this Power Purchase Agreement between Seller and Host, including the Exhibits attached hereto.

“**Annual Purchase True-Up**” shall have the meaning set forth in Section 5.2.

“**Business Day**” means any calendar day that is not a Saturday, Sunday. A Business Day shall open at 8:00 a.m. Prevailing Time and close at 5:00 p.m. Prevailing Time.

“**Commercial Operation Date**” means, with respect to the Facility, the date on which (a) the Facility is capable of producing and delivering Solar Energy to the Delivery Point; and (b) Seller has obtained all necessary Permits required in order for the Facility to deliver Solar Energy to the Delivery Point.

“**Commercial Operation Year**” means, with respect to the Facility, any consecutive twelve (12) Month period during the Term of this Agreement, commencing with the first Day of the Month following the Commercial Operation Date of such Facility, and each anniversary of such date thereafter.

“**Day**” means a period of twenty-four (24) consecutive hours beginning at 00:00 hours Prevailing Time on any calendar day and ending at 24:00 hours Prevailing Time on the same calendar day.

“Delivery Point” means, with respect to the Facility, the Meter, as further specified by Seller prior to the Commercial Operation Date.

“Dispute” shall have the meaning set forth in Section 18.1.

“Effective Date” shall have the meaning set forth in the Preamble.

“Environmental Attributes” means any and all current or future credits, benefits, emissions reductions, environmental air quality credits, emissions reduction credits, renewable energy credits, offsets and allowances, attributable to the Solar Facility, or otherwise attributable to the generation, purchase, sale or use of Solar Energy from or by the Solar Facility during the Term, howsoever entitled or named, resulting from the avoidance, reduction, displacement or offset of the emission of any gas, chemical or other substance, including without limitation any of the same arising out of legislation or regulation concerned with oxides of nitrogen, sulfur or carbon, with particulate matter, soot or mercury, or implementing the United Nations Framework Convention on Climate Change (UNFCCC) or the Kyoto Protocol to the UNFCCC or crediting “early action” emissions reduction, or laws or regulations involving or administered by the Clean Air Markets Division of the United States Environmental Protection Agency, or any state or federal entity given jurisdiction over a program involving transferability of Environmental Attributes, and any rights to such Environmental Attributes, including the Maryland Public Utility Commission.

“Event of Default” shall have the meaning set forth in Section 21.1.

“Excess Production Volume” shall have the meaning set forth in Section 5.2.

“Expected Commercial Operation Date” has the meaning set forth in Section 3.1.

“Facility” shall have the meaning set forth in the Preamble.

“Fair Market Value” shall have the meaning set forth in Section 9.1.

“Force Majeure” shall have the meaning set forth in Section 22.1.

“Governmental Authority” means any federal, state, local or municipal governmental body; any governmental, quasi-governmental, regulatory or administrative agency, commission, body or other authority exercising or entitled to exercise any administrative, executive, judicial, legislative, policy, regulatory or taxing authority or power; or any court or governmental tribunal; *provided, however*, that “Governmental Authority” shall not in any event include any Party.

“Host” shall have the meaning set forth in Preamble

“Host Energy Needs” shall have the meaning set forth in Section 5.1.

“Initial Period” shall have the meaning set forth in Section 3.1.

“Installer” shall have the meaning set forth in Section 4.3.

“Installed Capacity” means, the aggregate nameplate capacity of all installed Solar Panels of the Facility expressed in kilowatts (peak). Direct Current (DC) rating set forth in Exhibit B as 21.9 kW.

“Invoice” shall have the meaning set forth in Section 7.1.

“kWh” shall mean a kilowatt-hour, or the delivery of one-thousand watts of energy over one hour.

“MADCob” shall have the meaning set forth in Section 11.3.

“Material Adverse Effect” means any event, occurrence, change or effect of whatever nature (or events, occurrences, changes or effects, taken together) that (i) is, or is reasonably likely to be, materially adverse to the present or future business, operations, assets, liabilities, properties, results of operations or condition (financial or otherwise) of the Project or, including the design, development, construction or operation of the Facility as currently contemplated, or (ii) prevents or materially impairs or delays, or is reasonably likely to prevent or materially impair or delay, either Party’s ability to perform its obligations under this Agreement or to consummate the transactions contemplated hereby or thereby.

“Meter” shall mean the meter installed by Seller that measures the Solar Energy produced by the Facility as well as the energy consumed by the Host, and which meets the requirements of Article 20.

“Month” means a calendar month commencing at 00:00 Prevailing Time on the first Day of such month and ending at 24:00 Prevailing Time on the last Day of such month.

“Net Metering Payment” shall have the meaning set forth in Section 5.3.

“Operations Period” shall have the meaning set forth in Section 2.3

“Party” or “Parties” shall have the meaning set forth in the Preamble and includes any permitted assignee of a Party.

“Parties’ Representatives” shall have the meaning set forth in Section 18.1.

“Permits” means all material permits, consents, licenses, approvals, or authorizations from any Governmental Authority, required to own, construct, operate or maintain the Solar Facility, make available Solar Energy at the Delivery Point, and otherwise sell and transfer Solar Energy to Host.

“Prevailing Time” means Eastern Standard Time or Eastern Daylight Savings Time.

“Purchase Price” shall have the meaning set forth in Section 6.1.

“Seller” shall have the meaning set forth in the Preamble.

“Site” shall have the meaning set forth in the Preamble.

“**Solar Energy**” means the instantaneous electrical energy output (in kWh), intermittent and variable within the hour, made available from the Facility after the Commercial Operation Date at the Delivery Point, as measured by the Meter installed at the Delivery Point.

“**Solar Panels**” means those photovoltaic solar electric generating devices powered by the sun and related equipment necessary for the production of electric energy that are included in the Facility.

“**SRECs**” shall have the meaning set forth in Section 8.3.

“**Term**” means the period of time during which this Agreement shall remain in full force and effect, and which is further described in Article 2.

ARTICLE 2 - TERM AND TERMINATION

2.1 Term. The term of this Agreement shall consist of an initial period and an operations period, both as defined below (the “**Term**”).

2.2 Initial Period. The Initial Period shall begin on the Effective Date and end on the Commercial Operation Date (the “**Initial Period**”). During the Initial Period Seller shall confirm the feasibility of the Facility. Seller may terminate this Agreement during the Initial Period, but upon such termination shall remove all structures that is has installed and shall restore the roof to its full integrity at its full sole expense.

2.3 Operations Period. The Operations Period shall began on the Commercial Operations Date and end shall end twenty (20) years after the Commercial Operations Date, unless terminated before such date pursuant to this Agreement (the “**Operations Period**”).

ARTICLE 3- FACILITY & OWNERSHIP

3.1 Commercial Operation Date. The expected commercial operation date of the Facility is July 1, 2010 the “Expected Commercial Operation Date”). Seller shall notify Host in writing when Commercial Operation has been achieved and declared for the Facility by Seller. If Seller fails to fully install the Facility by the Expected Commercial Operation Date, then Host shall have the right to terminate this Agreement, Seller shall remove the Facility, and Host shall be relieved of all obligations related to this Agreement.

3.2 Facility Description. The Facility shall be a solar electric generating facility with an Installed Capacity estimated to be approximately 21.9 kilowatt (kW) to be located on the rooftop of the Site. Exhibit B to this Agreement provides a general description of the Facility, including a good faith estimate of the approximate amount of Solar Energy that the Facility is expected to produce. The Parties acknowledge and agree that Exhibit B may be updated by Seller prior to the Commercial Operation Date.

3.3 Legal Ownership. Seller will be the legal and beneficial owner of the Facility at all times. Seller will pledge the facility as collateral security in connection with any construction finances or permanent financing.

3.4 Purchase Option. Host will have an option to purchase the Facility after 7 years, consistent with IRS accelerated depreciation rules.

ARTICLE 4 – CONSTRUCTION, ACCESS & OPERATION

4.1 Contracting. Seller shall use licensed North American Board of Certified Electric Professionals (NABCEP) certified contractors to oversee the work of installing, operating, and maintaining the Facility. Seller will advise Host of the contractors being hired. Host shall have no contractual relationship with the contractors.

4.2 Permitting. Seller shall obtain all Permits for the Facility and shall design, install, operate, and maintain the Facility so as to keep it in good condition and repair, in compliance with law and with the generally accepted practices of the electric industry, in general, and the solar generation industry, in particular. Such work shall be at Seller's sole expense.

4.3 Seller & Installer Access. Host shall grant Seller and its designees, including Seller's installation contractor Standard Solar Inc of Gaithersburg, MD (the "*Installer*"), access to the Premises by lease or license for the purposes of designing, installing, operating, and maintaining the facility.

4.4 Time of Work. Except for emergency situations, Seller shall perform all work between the hours of 7:00 am and 7:00 pm, Monday through Saturday, in a manner that minimizes interference with Host and Host's tenants and licensees.

4.5 Security. Host will provide security for the Facility as part of its normal security procedures for the Site and will advise Seller immediately upon observing any damage to the Facility.

4.6 Site Modification. Host will agree not to modify the Site in such a way as to interfere with the construction, operation or maintenance of, or solar access of, the Facility.

4.7 Emergency Repairs. Seller will be permitted to shut down the Facility at any time in order to perform emergency repairs.

4.8 Maintenance Shutdowns. Seller shall give Host five (5) day notice of maintenance shutdowns. Seller shall not have any obligation to reimburse Host for costs of purchasing electricity which would have been produced by the Facility but for such a maintenance shutdown. Seller shall not schedule maintenance shutdowns during peak periods of electric generation and periods when peak energy and demand prices are charged by Host's backup electric service provider.

4.9 Site Condition Shutdowns. In addition to the right of Seller to shut down the Facility for emergencies or maintenance, Seller may shutdown the Facility if Seller reasonably believes Site conditions or activities of persons on the Site, which are not under the control of Seller, whether or not under the control of Host, may interfere with the safe operation of the Facility. Seller shall give Host notice of the shutdown immediately upon becoming aware of the potential for such conditions or activities.

4.10 Host Shutdown. Host from time to time may request Seller to temporarily stop operation of the Facility for reasons related to Host's activities in maintaining and improving the Site. To the extent that this period of time is greater than seven (7) days in any one calendar year, Host shall pay Seller the following for any and all days in excess of this seven (7) day period:

(A) Payments that Host would have made to Seller for electric energy that would have been produced during the period of the shutdown based upon estimates provided by PV Watts as per Exhibit B;

(B) Revenues from Environmental Attributes that Seller would have received with respect to electric energy that would have been produced during the period of the shutdown; as calculated in accordance with Seller's long-term SREC Purchase and Sale Agreement if such an agreement exists, or if no such agreement exists, the value of the SRECs during such a period as verified by a third party SREC broker.

ARTICLE 5 – PURCHASE & SALE OF ELECTRICITY

5.1 Electricity Purchase. During the Operations Period, Host shall buy from Seller all of the Solar Energy produced by the Facility, *provided however* that Host shall have no obligation to purchase more electricity on an annual basis than the total amount of energy the Host consumes, as measured in kWh (the “**Host Energy Needs**”) pursuant to Section 5.2 of this Agreement. Seller shall not guarantee that any particular amount of electric energy will be produced by the Facility for any hourly, daily, monthly, annual or other period.

5.2 Annual Purchase True-Up

(A) At the end of each Commercial Operation Year, Seller and Host shall compare the total Solar Energy produced by the Facility during such Commercial Operation Year and the total energy actually consumed by the Host during such Commercial Operation Year, each as measured by the Meter. To the extent that the Facility has produced more Solar Energy, measured in kWh, during such Commercial Operation Year than the Host Energy Needs for such Commercial Operation Year (“**Excess Production Volume**”), Seller shall make payment to the Host for an amount equal to the Excess Production Volume for such Commercial Operation Year multiplied by the relevant Purchase Price for such Commercial Operation Year (the “**Annual Purchase True-Up**”).

(B) Seller shall make payment equal to the Annual Purchase True-Up no later than ten (10) Business Days at the end of each Commercial Operation Year.

5.3 Net Metering. To the extent that Net Metering is available, Host will participate in the local utilities, state, or regional net metering program. If Host is provided with a payment pursuant to net metering (a “**Net Metering Payment**”) by the local utility, it shall provide Seller with payment equal to the Net Metering Payment within ten (10) Business Days of receipt of such Net Metering Payment.

5.4 Supplemental Energy. During periods when the Facility is unable to meet the Host Energy Needs, Host will purchase electricity from the local electric utility or another electric service provider as stated in Section 8.

ARTICLE 6- ELECTRICITY PURCHASE PRICE

6.1 Rate Schedule. Host shall pay Seller for each kilowatt-hour of Solar Energy purchased from Seller pursuant to this Agreement at those rates set out in Exhibit A (the “**Purchase Price**”). The Purchase Price is set at thirteen (13) cents per kWh in the first two Commercial Operation Years, fourteen (14) cents for the third Commercial Operation Year, and escalated annually at three and one half percent (3.5%), as set out in Exhibit A, and subject to the Rate Cap set out below in Section 6.2.

6.2 Rate Cap. Under no circumstances shall Host pay more for electricity from the Facility than the then current electricity rate set forth by the public utility serving Host at such time.

ARTICLE 7- BILLING AND PAYMENT

7.1 Billing Invoices. The billing period shall be monthly. No later than ten (10) Business Days after the end of each Month, Seller shall provide to Host an invoice equal to the amount of Solar Energy actually delivered to the Delivery Point by Seller to Host multiplied by the Purchase Price during the Monthly billing period (the “**Invoice**”). Seller shall transmit each invoice by fax, first class mail or as otherwise mutually agreed by the Parties in writing. Each invoice shall include sufficient detail to allow Host to verify such invoice.

7.2 Payments. Payments due under this Agreement shall be due and payable thirty (30) Days after receipt of the Invoice.

7.3 Account Information. Payment from Host to Seller shall be made by direct deposit to the following account:

University Park Community Solar LLC
Chevy Chase Bank
Account Number:
Routing Number:

or by check to: University Park Community Solar LLC

% James Gekas
4113 Tennyson Road
University Park, MD 20782

7.4 Records; Auditing.

(A) Each Party shall maintain complete and accurate records in accordance with generally accepted accounting standards and as may be necessary for the purpose of ascertaining the accuracy of all relevant data, estimates or statements of charges submitted hereunder.

ARTICLE 8 – SUPPLEMENTAL POWER, INCENTIVES, SRECS

8.1 Excess Needs. Host shall be responsible for obtaining all of its requirements for electric energy in excess of the amounts produced by the Facility and shall pay for such service pursuant to contracts with or applicable tariffs of the local electric utility or other electric service provider. Seller shall have no obligation to obtain or pay for such supplemental or back-up electricity.

8.2 Incentives. Seller shall receive all payments available under any state solar incentive program and any other federal, state or local programs applicable to renewable energy sources.

8.3 SRECS. Seller shall be the owner of any solar renewable energy certificates (“**SRECS**”) or other environmental attributes which may arise as a result of the operation of the Facility.

8.4 Capacity. Seller shall be entitled to receive any payments for electric capacity or ancillary services which may become available to the Facility, or any other similar payments in connection with the ownership of generation capacity.

8.5 Required Information. Upon reasonable request, Host shall provide Seller with information required for preparing documents necessary for Seller to receive the foregoing.

ARTICLE 9 - HOST PURCHASE OPTION

9.1 Purchase Option. At the end of the seventh (7th) Commercial Operation Year, and annually thereafter, the Host may exercise an option to purchase the facility from Seller at a cost based on fair market value of the Facility at the time, as determined by a mutually acceptable professional appraiser (the “**Fair Market Value**”). The appraiser shall be selected according to the process set out in Section 9.2.

9.2 Appraisal. Host and Seller shall choose a reputable and credentialed independent appraiser, which such appraiser shall determine, at equally shared expense of the Parties, the Fair Market Value of the Facility. In the event that the Parties cannot agree upon a single independent appraiser, each Party shall contract for an independent appraiser at its own expense, and the Fair Market Value shall be the simple average of the determinations of the two independent appraisers. The appraisal shall consider the projected value of the Facility, to include but not to be limited to the following:

(A) The Facility as an income-producing entity over the remaining Operational Period;

(B) The fair market value of the physical components of the Facility;

(C) The projected income from remaining incentives and SRECs associated with the Facility;

(D) The long term maintenance and costs associated with the Facility, including but not limited to scheduled inverter replacements, inspections and insurance.

ARTICLE 10 - CLOSURE OF PREMISES

In the event the Premises are closed as a result of an event not related to Force Majeure, Host shall nevertheless continue to pay Seller for all electricity produced by the Facility.

ARTICLE 11 - SALE OF SITE, DISBANDMENT OF HOST

11.1 Sale of Site. In the event that Host sells the Site, Host shall either (a) arrange for the third party purchaser of the Site to assume this Agreement with the consent of the Seller, such consent not to be unreasonably withheld, or (b) provide Seller with a mutually agreeable substitute location for the Facility. Host shall pay the costs associated with any removal and the relocation of the Facility in accordance with Article 11, including installation, testing, and interconnection costs; or (c) purchase the facility under the terms of Article 9.

11.2 Church House Sale. In the event that Host sells the church house (which is a factor in revenue expectations for Seller), Host shall assume the responsibility of compensating Seller for unmet projected revenues associated with the pro rata production of Solar Energy and all associated SRECs, as calculated through a long-term SREC agreement, from the Church House during of the remainder of the Term.

11.3 Disbandment or Dissolution of Host. In the event of the disbandment or dissolution of the Host as a corporate entity, the Site shall convey to the ownership of the Mid-Atlantic District of the Church of the Brethren (“**MADCoB**”) of Ellicott City, Maryland, and this Agreement shall be assigned to MADCoB under the plans of organization of Seller’s church and the by-laws of Seller. MADCoB shall have the unprejudiced and free option to renegotiate this Agreement with Seller or to assume this contract and all its terms and implications and contemplations within ten (10) days of the Host’s dissolution or disbandment. Assumption of the contract, as is, will be the default position in the event there is no renegotiation within the ten (10) day period.

ARTICLE 12 – DECOMMISSIONING & REMOVAL

If, at the end of the Operations Period, Host does not exercise its option to purchase the Facility and the Parties do not agree to any extension of the Agreement, then Seller, at its sole expense, shall decommission and remove the Facility from the Site. Seller shall not be obligated, however, to remove any support structures for the Facility which are affixed to Host’s structures or any below grade structures, including foundations and conduits, or any roads.

ARTICLE 13 – PERMITS & APPROVALS

13.1 Consents & Approvals. Seller shall be responsible for obtaining, and paying for, any and all consents or approvals from the local electric utility which are necessary for the construction, commissioning, and operation of the Facility.

13.2 Government Approvals. Seller shall also pay for and obtain all approvals from governmental entities necessary for the construction and operation of the Facility, including but not limited to land use permits, building permits, and demolition and waste disposal permits.

13.3 Host Consents. Host shall pay for and obtain all consents required for it to execute this Agreement and perform its obligations under this Agreement from its lenders, tenants and any other persons with an interest in the Site. These consents shall include estoppel certificates which recognize the rights of Seller under this Agreement.

ARTICLE 14 – TAXES

14.1 Facility Tax Liabilities. Seller shall be responsible for all income taxes associated with payments from Host to Seller pursuant to this Agreement.

14.2 Facility Tax Assets. Seller, as owner of the Facility, shall be entitled to all tax benefits under federal and state income tax laws with respect to the Facility.

14.3 Taxes on Electricity. Host shall be responsible for all taxes, fees, and charges, including sales, use and gross receipts taxes, imposed or authorized by any Governmental Authority on the sale of electric energy by Seller to Host, provided however, that Seller shall be responsible for paying any and all taxes associated with energy sold from the Facility through net metering.

14.4 Ad Valorem & Property Taxes. Host shall be responsible for all ad valorem personal property or real property taxes levied against the Site and its improvements and personal property located at the Site, except that Seller shall be responsible for ad valorem personal property or real property taxes levied against the Facility.

ARTICLE 15 – INSURANCE

15.1 Insurance Requirements. The insurance requirements for the Facility are set forth in Exhibit C to this Agreement. The Parties shall cooperate to ensure that both Parties meet any insurance requirements specified by the state solar incentive program, the utility interconnect agreement, or by other requirements set forth in state or local rules or regulations. Host shall insure the Facility by adding its value to existing building coverage. Seller shall be responsible for all costs and expenses associated with insurance for the Facility, including any additional premium rate increases that might be incurred by Host due solely to a claim made because of damages to the Facility.

ARTICLE 16 – INDEMNIFICATION

Each party shall indemnify, defend and hold harmless the other party from and against any claims arising from or out of any event, circumstances, active incident first occurring or existing on such Party's side of the Delivery Point. Each party shall indemnify, defend and hold harmless the other party against any governmental charges for which such party is responsible. Seller warrants that it shall deliver to Host energy free and clear of all liens, security interests, claims and encumbrances or any interests therein or thereto by any person arising prior to the Delivery Point.

ARTICLE 17 – LIMITATION ON DAMAGES

EXCEPT AS OTHERWISE PROVIDED IN THIS AGREEMENT THERE IS NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND ANY AND ALL IMPLIED WARRANTIES ARE DISCLAIMED. LIABILITY SHALL BE LIMITED TO DIRECT ACTUAL DAMAGES ONLY, SUCH DIRECT ACTUAL DAMAGES SHALL BE THE SOLE AND EXCLUSIVE REMEDY AND ALL OTHER REMEDIES OR DAMAGES AT LAW OR IN EQUITY ARE WAIVED UNLESS EXPRESSLY HEREIN PROVIDED. NEITHER PARTY SHALL BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, PUNITIVE, EXEMPLARY OR INDIRECT DAMAGES, LOST PROFITS OR OTHER BUSINESS INTERRUPTION DAMAGES, BY STATUTE, IN TORT OR CONTRACT, UNDER ANY INDEMNITY PROVISION OR OTHERWISE. UNLESS EXPRESSLY HEREIN PROVIDED, AND SUBJECT TO THE PROVISIONS OF SECTION 16 (INDEMNIFICATION), IT IS THE INTENT OF THE PARTIES THAT THE LIMITATIONS HEREIN IMPOSED ON REMEDIES AND THE MEASURE OF DAMAGES BE WITHOUT REGARD TO THE CAUSE OR CAUSES RELATED THERETO, INCLUDING THE NEGLIGENCE OF ANY PARTY, WHETHER SUCH NEGLIGENCE BE SOLE, JOINT OR CONCURRENT, OR ACTIVE OR PASSIVE

ARTICLE 18 – DISPUTE RESOLUTION

18.1 Dispute Negotiation. In the event of any dispute arising under this Agreement (a "**Dispute**"), within ten (10) Days following the delivered date of a written request by either Party, (1) each Party shall appoint a representative (individually, a "**Party Representative**", together, the "**Parties' Representatives**"), and (2) the Parties' Representatives shall meet, negotiate and attempt in good faith to resolve the Dispute quickly, informally and inexpensively.

18.2 Non-Binding Mediation. In the event the Parties' Representatives cannot resolve the Dispute within thirty (30) Days after commencement of negotiations pursuant to Section 18.1, the Parties shall submit to non-binding mediation.

18.3 Arbitration. In the event that the Parties are unable to resolve their dispute through non-binding mediation pursuant to Section 18.2 within thirty (30) Days following the initiation of such mediation, either Party may seek binding arbitration. Arbitration pursuant to this Section 18.3 shall take place in the State of Maryland.

ARTICLE 19 – REPRESENTATIONS AND WARRANTIES

19.1 Mutual Representations and Warranties. Beginning on the Execution Date (Initial Period), each Party represents and warrants to the other Party that:

(A) It is duly organized, validly existing and in good standing under the laws of the jurisdiction of its formation;

(B) The execution, delivery and performance of this Agreement is within its powers, have been duly authorized by all necessary action and do not violate any of the terms and conditions in its governing documents, any contracts to which it is a party or any law, rule, regulation, order or the like applicable to it;

(C) This Agreement and each other document executed and delivered in accordance with this Agreement constitutes its legally valid and binding obligation enforceable against it in accordance with its terms;

(D) It is not bankrupt and there are no proceedings pending or being contemplated by it or, to its knowledge, threatened against it which would result in it being or becoming bankrupt;

(E) There is not pending or, to its knowledge, threatened against it or any of its affiliates any legal proceedings that could materially adversely affect its ability to perform its obligations under this Agreement;

(F) It is acting for its own account, has made its own independent decision to enter into this Agreement and as to whether this Agreement is appropriate or proper for it based upon its own judgment, is not relying upon the advice or recommendations of the other Party in so doing, and is capable of assessing the merits of, and understands and accepts, the terms, conditions and risks of this Agreement.

(G) It shall continue to be duly organized, validly existing and in good standing under the laws of the jurisdiction of its formation;

(H) It shall maintain (or obtain from time to time as required, including through renewal, as applicable) all regulatory authorizations necessary for it to legally perform its obligations under this Agreement; and

(I) It shall perform its obligations under this Agreement in a manner that does not violate any of the terms and conditions in its governing documents, any contracts to which it is a party or any law, rule, regulation, order or the like applicable to it.

ARTICLE 20 - DELIVERY AND METERING

20.1 Delivery. The electric energy from the Facility shall be delivered from Seller to Host at the Delivery Point, as set forth in Exhibit B and otherwise in compliance with all requirements of the local electric utility.

20.2 Title and Risk of Loss. As between the Parties, Seller shall be deemed to be in control of the Solar Energy up to and until the Delivery Point, and Host shall be deemed to be in control of such Solar Energy at and after the Delivery Points.

20.3 Metering.

(A) Seller shall install, own, operate and maintain all metering and data processing equipment capable of the measurement, recordation and transmission of information regarding both the Solar Energy generated by the Solar Facility and the energy utilized by the Host (collectively, the “**Meter**”).

(B) Seller shall install a meter capable of remote monitoring via the internet and shall provide Host with remote online access to the Meter via a dedicated website.

20.4 Testing at Request of Host. The output of the Facility shall be measured by the Meter. Seller shall test the Meter in accordance with industry standards. In the event of a discrepancy between actual Meter readings and accurate readings, billing adjustments shall be made retroactively to the date of and the previous testing date of the meter (not to exceed 180 days).

20.5 Additional Testing. Host shall pay for any independent testing of the meter(s) in excess of such minimum testing schedule that Host deems necessary. But if any meter test shows the meter to be in error by more than 2%, (1) Seller shall pay for the cost of the test and (2) billing adjustments shall be made retroactively to the date of and the previous testing date of the meter (not to exceed 180 days).

ARTICLE 21- DEFAULT AND REMEDIES

21.1 Events of Default.

(A) Any of the following shall constitute an Event of Default (“**Event of Default**”) on the part of either Party upon its occurrence and no cure period shall be applicable:

(1) Either Party’s actual fraud or willful misconduct in connection with this Agreement;

(2) Either Party’s assignment of this Agreement or assignment of any of its rights hereunder for the benefit of creditors; and

(3) Either Party’s filing of a petition in voluntary bankruptcy or insolvency or for reorganization or arrangement under the bankruptcy laws of the United States

or under any insolvency act of any state, or Seller voluntarily taking advantage of any such law or act by answer or otherwise.

(4) The failure of either Party to comply with any material obligation under this Agreement which would have a Material Adverse Effect on the other Party

(B) If any representation or warranty made by either Party in this Agreement proves to have been false or misleading in any material respect when made or ceases to remain true during the Term if such cessation would reasonably be expected to have a Material Adverse Effect on the other Party, it shall constitute an Event of Default unless cured within thirty (30) Days after the date of written notice.

(C) The filing of an involuntary case in bankruptcy or any proceeding under any other insolvency law against either Party as debtor that could materially impact the other Party's ability to perform its obligations hereunder shall constitute an Event of Default; *provided, however*, that such a Party does not obtain a stay or dismissal of the filing within one hundred eighty (180) Days.

21.2 Damages and Termination. Upon the occurrence of an Event of Default that occurs at any time during the Term, the non-defaulting Party shall have the right to pursue all available legal or equitable remedies available to it, including the right to collect damages.

21.3 Waiver and Exclusion of Other Damages.

(A) THE PARTIES CONFIRM THAT THE EXPRESS REMEDIES AND MEASURES OF DAMAGES PROVIDED IN THIS AGREEMENT SATISFY THE ESSENTIAL PURPOSES HEREOF. IF NO REMEDY OR MEASURE OF DAMAGES IS EXPRESSLY HEREIN PROVIDED, THE OBLIGOR'S LIABILITY SHALL BE LIMITED TO DIRECT, ACTUAL DAMAGES ONLY.

21.4 Duty to Mitigate. Each Party agrees that it has a duty to mitigate damages and covenants that it shall use reasonable efforts to minimize any damages it may incur as a result of the other Party's performance or non-performance of this Agreement.

ARTICLE 22 – FORCE MAJEURE

22.1 Definition of Force Majeure. An event of Force Majeure means any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, any curtailment, order, regulation or restriction imposed by a court or governmental military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure event does not include an act of negligence or intentional wrongdoing. Neither the Host nor Seller shall be considered in default as to any obligation under the PPA if prevented from fulfilling the obligation due to an event of Force Majeure.

ARTICLE 23– NOTICES

Notices shall, unless otherwise specified herein, be in writing and may be delivered by hand delivery, United States mail, overnight courier service, facsimile or electronic messaging (e-

mail). Whenever this Agreement requires or Permits delivery of a “notice” or requires a Party to “notify”), the Party with such right or obligation shall provide a written communication in the manner specified below. A notice sent by facsimile transmission or email will be recognized and shall be deemed received on the day on which such notice was transmitted if received before 5 p.m. Eastern prevailing time (and if received after 5 p.m., on the next day) and a notice by overnight mail or courier shall be deemed to have been received two (2) days after it was sent or such earlier time as is confirmed by the receiving Party unless it confirms a prior oral communication, in which case any such notice shall be deemed received on the day sent. A Party may change its addresses by providing notice of same in accordance with this provision. All written notices shall be directed as follows:

To Seller:

University Park Community Solar LLC
4313 Tuckerman Street
University Park, MD 20782

To Host:

Church of the Brethren
4413 Tuckerman Street
University Park, MD 20782

ARTICLE 24 – MISCELLANEOUS

24.1 Change of Law. Any provision declared or rendered unlawful by any applicable court of law or regulatory agency or deemed unlawful because of a statutory change will not otherwise affect the remaining lawful obligations that arise under this Agreement; and provided, further, that if such an event occurs, the Parties shall use their best efforts to reform this Agreement in order to give effect to the original intention of the Parties.

24.2 Continuing Effect. Notwithstanding anything to the contrary in this Agreement, applicable provisions of this Agreement, including all indemnity rights, audit rights and confidentiality obligations, shall continue in effect after termination of this Agreement, including early termination, to the extent necessary to enforce or complete the duties, obligations or responsibilities of the Parties arising prior to such termination and, as applicable, to provide for final billings and adjustments related to the period prior to such termination, repayment of any money due or owing to either Party pursuant to this Agreement, repayment of principal and interest associated with security funds, if any, and the indemnifications specified in this Agreement.

24.3 Governing Law. This Agreement and the rights and duties of the parties hereunder shall be governed by and construed, enforced and performed in accordance with the laws of the State of Maryland.

24.4 Assignment. Neither Party shall assign this Agreement or its rights hereunder without the prior written consent of the other Party, which consent shall not be unreasonably withheld; provided, however, either Party may, without the consent of the other Party.

24.5 Waiver. The failure of either Party to enforce or insist upon compliance with or strict performance of any of the terms or conditions of this Agreement, or to take advantage of any of its rights thereunder, shall not constitute a waiver or relinquishment of any such terms, conditions, or rights, but the same shall be and remain at all times in full force and effect.

24.6 Relationship of the Parties. This Agreement shall not be interpreted to create an association, joint venture, or partnership between the Parties nor to impose any partnership obligation or liability upon either Party. Neither Party shall have any right, power, or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as an agent or representative of, the other Party.

24.7 Severability. In the event any of the terms, covenants, or conditions of this Agreement, its Exhibits, or the application of any such terms, covenants, or conditions, shall be held invalid, illegal, or unenforceable by any Governmental Authority, all other terms, covenants, and conditions of the Agreement and their application not adversely affected thereby shall remain in force and effect; *provided, however*, that Host and Seller shall negotiate in good faith to attempt to implement an equitable adjustment in the provisions of this Agreement with a view toward effecting the purposes of this Agreement by replacing the provision that is held invalid, illegal, or unenforceable with a valid provision the economic effect of which comes as close as possible to that of the provision that has been found to be invalid, illegal or unenforceable.

24.8 Complete Agreement; Amendments. The terms and provisions contained in this Agreement constitute the entire agreement between Host and Seller with respect to the Solar Facility and shall supersede all previous communications, representations, or agreements, either verbal or written, between Host and Seller with respect to the sale of Solar Energy from the Solar Facility. This Agreement may be amended, changed, modified, or altered, *provided* that such amendment, change, modification, or alteration shall be in writing and signed by both Parties hereto and the Financing Party, if any.

24.9 Headings. Captions and headings used in this Agreement are for ease of reference only and do not constitute a part of this Agreement.

24.10 Counterparts. This Agreement may be executed in any number of counterparts, including in facsimile and electronic formats (including portable document format (.pdf)), each of which is an original and all of which constitute one and the same instrument.

IN WITNESS WHEREOF, each Party has caused this Agreement to be duly executed by its authorized representatives as of the date of last signature provided below.

David Brosch

Date:

Title: President

Thomas Eichbaum

Date:

Title: Secretary

Donald Hooker Monroe, Jr.

Date:

Title: Chairman of Property Commission

University Park Church of the Brethren

Keith Rutter

Date:

Title: Church Board Chair

University Park Church of the Brethren

EXHIBIT A
PPA ELECTRICITY RATES

Electric energy rates effective in each year between UPCS and Host. The Operation Period is for 20 years. Rates are adjusted by an annual rate of 3.5% beginning the Fourth Commercial Year, according to Section 6 of the PPA.

Commercial Operation Year	PPA Rate Per KWh
First	
Second	
Third	
Fourth	
Fifth	
Sixth	
Seventh	
Eighth	
Ninth	
Tenth	
Eleventh	
Twelfth	
Thirteenth	
Fourteenth	
Fifteenth	
Sixteenth	
Seventeenth	
Eighteenth	
Nineteenth	
Twentieth	

EXHIBIT B
DESCRIPTION OF PV SITE, PREMISES, AND THE
PV SYSTEM SPECIFICATION ("PV WATTS")

Page 1 of 5

Sales & Customer Service
1-888-GRID TIE
(301) 944-1200
sales@standardsolar.com



Corporate Office
202 Perry Parkway, #7
Gaithersburg, MD 20877
(301) 944-1200

Memorandum

Date: January 21, 2010

To: University Park Solar Cooperative, LLC

From: Lee Bristol, CTO, Standard Solar, Inc

Subject: Church of the Brethren Solar Shading Analysis

Standard Solar used the solar Pathfinder tool to analyze the effect of shading on the solar array to be installed on the South facing roof of the Church of the Brethren. Readings were taken at 10 locations presented on the following diagram:

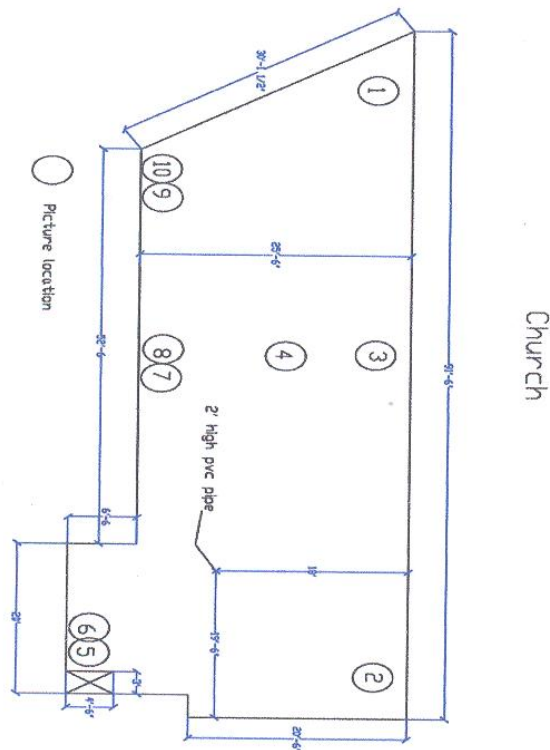


Exhibit B, Page 2 of 5

There is a large tree on the Western or Afternoon side of the pictures which will be cut down and therefore during the analysis the effect of this trees shade was removed from the pictures.

The readings at representative locations 1, 2, 5, and 10 are included below. 1 and 2 showed no shading in the hours of 9 AM to 3 PM, the "solar window" as would be expected since they were taken at the top of the roof.. The pathfinder pictures are attached in numerical order:

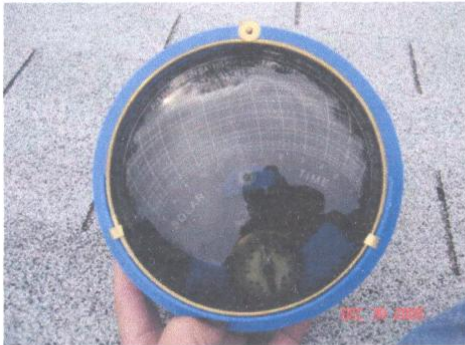
Picture 1



Picture 5



Picture 2



Picture 10



The following picture shows the layout of the panels on the roof.



We allotted panels to each of seven locations on the roof that were mapped to solar pathfinder pictures and calculated the kw-hrs per year which can be expected to be produced for each section. The following table presents the numbers by section and calculates a yearly production of 26,308 kw-hrs.


**Solar Pathfinder Analysis for Church of the Brethren
Calculation of KW-Hrs/Year for Pathfinder Locations**

Location	Yearly Production
Location 1	5,452
Location 2	4,340
Location 3	3,667
Location 4	3,595
Location 5	3,540
Location 6	3,057
Location 7	2,657
Totals	26,308


The PV Watts calculation for an array of the same size is 30,443 kw-hrs per year and thus the array with shading is expected to produce 86% of a fully un-shaded array.

PVWATTS: AC Energy and Cost Savings

Page 1 of 1



AC Energy
&
Cost Savings



Station Identification	
City:	Baltimore
State:	Maryland
Latitude:	39.18° N
Longitude:	76.67° W
Elevation:	47 m
PV System Specifications	
DC Rating:	21.9 kW
DC to AC Derate Factor:	0.870
AC Rating:	19.0 kW
Array Type:	Fixed Tilt
Array Tilt:	39.2°
Array Azimuth:	180.0°
Energy Specifications	
Cost of Electricity:	7.8 ¢/kWh

Results			
Month	Solar Radiation (kWh/m ² /day)	AC Energy (kWh)	Energy Value (\$)
1	3.47	2101	163.88
2	4.40	2391	186.50
3	4.79	2767	215.83
4	5.12	2800	218.40
5	5.28	2872	224.02
6	5.70	2884	224.95
7	5.61	2924	228.07
8	5.28	2753	214.73
9	4.93	2537	197.89
10	4.90	2724	212.47
11	3.58	2011	156.86
12	2.85	1679	130.96
Year	4.66	30443	2374.55

Output Hourly Performance Data

About the Hourly Performance Data


Run PVWATTS v1 for another US location or an international location
Run PVWATTS v2 (US only)

Please send questions and comments regarding PVWATTS to Webmaster

Disclaimer and copyright notice

Output Results as Text

Saving Text from a Browser



[Return to NREL home page \(https://nrel.gov/\)](https://nrel.gov/)

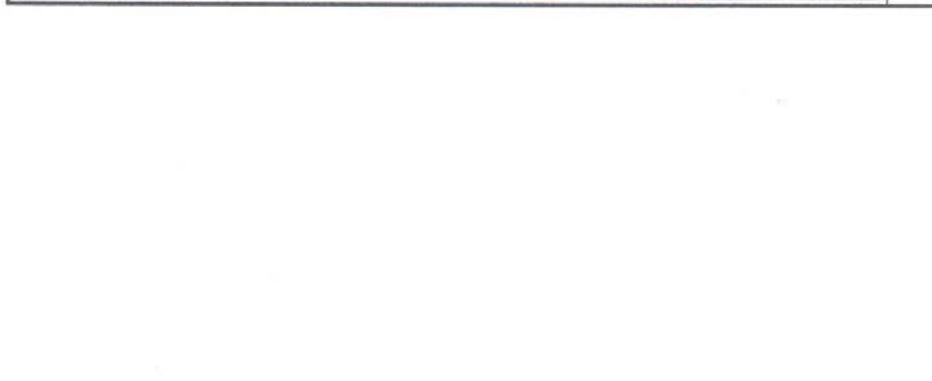


EXHIBIT C
INSURANCE POLICY
ATTACHED TO PPA

EXHIBIT D
CONTRACT BETWEEN STANDARD SOLAR AND UPCS W/INVOICE
ATTACHED TO PPA

EXHIBIT E
OPERATING AGREEMENT OF UPCS LLC
ATTACHED TO PPA

EXHIBIT F
BYLAWS OF UNIVERSITY PARK CHURCH OF BRETHREN
ATTACHED TO PPA

EXHIBIT G OPERATIONS AND MAINTENANCE SERVICE PLAN

University Park Community Solar LLC

Standard Solar, Inc. offers an annual Operations and Maintenance plan after the first year of operation. The O & M consists of preventive maintenance and troubleshooting for the purpose of providing services that would otherwise not be covered under warranty. The individuals conducting O & M shall conform to all site safety regulations, including wearing of personal protective equipment and ability to shut off the array safely as needed.

Operations and Maintenance consists of the following (every 12 months):

- A visual inspection of all the mechanical, electrical, and PV components.
- All open air wire (USE-2) and Multi Contact "MC" connectors at the array are visually inspected for excessive drooping, abrasion, disconnection or any other hazard.
- The PV modules are inspected for damage and soiling. Excessive soiling is removed by using a mild water based detergent (i.e. dishwashing liquid) by hand or an alternate non-high pressure method that complies with the panel warranty.
- The inverter cooling system is inspected and cleaned per manufacturers' recommended procedure. Filters are inspected and replaced according to schedule.
- All electrical screw type fittings located at Combiner Boxes, and Inverters. Disconnects and other electrical components are checked for proper torque and are marked with a permanent marking device.
- Check fuse continuity for each DC circuit in each combiner box. Replace defective fuses accordingly.
- Any potential problems and damage are identified and brought to the attention of Church of the Brethren and University Park Community Solar LLC for review.
- Standard Solar will complete and provide a "Work Completion" certificate after the work is complete. Upon successful completion of the O&M actions and "Acceptance" of all of the work, the responsible manager will countersign the Work Completion certificate.

O&M Service Plan Fee: ***** per year with panel cleanings

Sample Contract Documents

Engineering, Procurement, and Construction (EPC) Contract

**SOLAR ENERGY GENERATION SYSTEM
ENGINEERING, PROCUREMENT AND CONSTRUCTION AGREEMENT**

BY AND BETWEEN

University Park Community Solar, LLC

AS OWNER

AND

STANDARD SOLAR, INC.

AS SUPPLIER

AS OF

April 14, 2010

TABLE OF CONTENTS

	<u>Page</u>
ARTICLE I - WORK	1
Section 1.1 - General Description of the Work.....	1
Section 1.2 - Definitions Relating to the Work.....	1
ARTICLE II - [INTENTIONALLY DELETED]	2
ARTICLE III - COMMENCEMENT OF WORK AND SCHEDULE.....	2
Section 3.1 - Commencement of Work.....	2
Section 3.2 - Schedule	2
ARTICLE IV- PERSONNEL AND SUBCONTRACTORS	2
Section 4.1 - Personnel	2
Section 4.2 - SSI's Representative.....	2
Section 4.3 - Subcontractors	2
ARTICLE V - SSI'S RESPONSIBILITIES	3
Section 5.1 - Control of the Work.....	3
Section 5.2 - Safety Documentation and Plan	3
Section 5.3 - Quality Assurance	3
Section 5.4 - Access to the Site.....	3
Section 5.5 - Cleaning Up.....	4
ARTICLE VI - SITE CONDITIONS.....	4
Section 6.1 - Site Visit.....	4
Section 6.2 - Concealed or Unknown Site Conditions.....	4
Section 6.3 - Environmental Conditions	4
ARTICLE VII - SUBSTITUTIONS	5
Section 7.1 - System Plans and Specifications	5
Section 7.2 - Materials.....	5
ARTICLE VIII - OWNER RESPONSIBILITIES	5
Section 8.1 - Information and Work	5
Section 8.2 - Owner's Representative.....	5
Section 8.3 - Owner Cooperation	5
Section 8.4 - Location of and Access to the Site	5
Section 8.5 - Site Information.....	6
Section 8.6 - Maintenance of Roof, Existing Roof Warranty and Site Maintenance.....	6
Section 8.7 - Financial Information and Credit Requirements	6
Section 8.8 - Mechanics and Construction Lien Information	6

ARTICLE IX - COMPLETION OF WORK	7
Section 9.1 - Owner Access to System during Work.....	7
Section 9.2 - Acceptance Tests	7
Section 9.3 - Substantial Completion	7
Section 9.4 – Punchlist	8
Section 9.5 - Final Completion	8
ARTICLE X - CONTRACT PRICE AND PAYMENT	9
Section 10.1 - Contract Price	9
Section 10.2 - Expenses under this Agreement.....	9
Section 10.3 - Progress Payments (NOT APPLICABLE).....	9
Section 10.4 - Lien Waivers	10
Section 10.5 - Form of Payment	10
ARTICLE XI - CHANGES TO THE WORK	10
Section 11.1 - Changes	10
Section 11.2 - Changes Initiated by SSI	10
Section 11.3 - Changes Initiated by Owner	11
Section 11.4 - Changes Involving Schedule Extensions.....	11
Section 11.5 - Changes to the Contract Price	12
Section 11.6 - Change Pending Resolution of Disputes	12
Section 11.7 - Documentation	12
ARTICLE XII - REPRESENTATIONS; WARRANTIES	12
Section 12.1 - Authorizations	12
Section 12.2 - Compliance.....	12
Section 12.3 - Conflicts of Interest; Preferential Treatment	12
Section 12.4 - Warranty of the Work and the System	12
Section 12.5 - Manufacturer Warranties	13
Section 12.6 - Exclusivity of Warranties	13
Section 12.7 - Exclusions from Warranty	13
Section 12.8 – Survival.....	13
ARTICLE XIII - DEFAULT; TERMINATION.....	14
Section 13.1 - Termination by Owner	14
Section 13.2 - Termination by SSI.....	14
ARTICLE XIV - FORCE MAJEURE	14
Section 14.1 - Definition.....	14
Section 14.2 - Force Majeure Event	15
Section 14.3 - Termination for Extended Force Majeure	15
ARTICLE XV - TITLE; RISK OF LOSS.....	15
Section 15.1 - Clear Title.....	15

Section 15.2 - SSI's Drawings.....	16
Section 15.3 Transfer of Care, Custody and Control; Risk of Loss.....	16
ARTICLE XVI - MUTUAL GENERAL INDEMNITY	16
ARTICLE XVII - LIMITATIONS OF LIABILITY.....	16
Section 17.1 - Waiver of Certain Damages	16
Section 17.2 - Limitation of Liability	16
ARTICLE XVIII - RELATIONSHIP OF PARTIES	17
ARTICLE XIX - INSURANCE.....	17
Section 19.1 - SSI Insurance Requirements.....	17
Section 19.2 - Owner Insurance Requirements.....	18
ARTICLE XX - DISPUTE RESOLUTION	18
Section 20.1 - Procedure.....	18
Section 20.2 - Termination During Dispute.....	19
Section 20.3 - Performance During Dispute	19
ARTICLE XXI - NOTICES.....	19
ARTICLE XXII - GENERAL PROVISIONS	20
Section 22.1 - Interpretation	20
Section 22.2 - Amendments.....	20
Section 22.3 - Assignment.....	20
Section 22.4 - Successors and Assigns	21
Section 22.5 - No Waiver	21
Section 22.6 - Survival	21
Section 22.7 - Rights and Remedies	21
Section 22.8 - Headings.....	21
Section 22.9 - Severability.....	21
Section 22.10 - Compliance with Laws	22
Section 22.11 - Governing Law; Jurisdiction; Waiver of Jury Trial.....	22
Section 22.12 - Counterpart Execution.....	22
Section 22.13 - No Confidentiality Regarding Tax Structure or Treatment	22
Section 22.14 - Entire Agreement.....	23
EXHIBIT A - SYSTEM DESCRIPTION AND SPECIFICATIONS.....	24
EXHIBIT B - SCHEDULE OF WORK.....	26
EXHIBIT C – SAMPLE FORM OF INVOICE.....	28
EXHIBIT D - SSI NOTICE OF SUBSTANTIAL COMPLETION AND OWNER NOTICE TO COMPLETE	29
EXHIBIT E - NOTICE OF FINAL COMPLETION	30
EXHIBIT F – CHANGE ORDER	31
EXHIBIT G - LIEN WAIVER FORM	32

SOLAR ENERGY GENERATION SYSTEM ENGINEERING, PROCUREMENT AND CONSTRUCTION AGREEMENT

This Solar Energy Generation System Engineering, Procurement and Construction Agreement (this "Agreement") is made and entered into as of April 14, 2010 ("Effective Date"), by and between University Park Community Solar, LLC a Maryland corporation with offices at 4313 Tuckerman St, University Park, MD 20782 ("Owner"), and STANDARD SOLAR, INC., a Delaware corporation with offices at 202 Perry Parkway, #7, Gaithersburg, Maryland 20877 ("SSI"). Owner and SSI are sometimes referred to individually herein as a "Party" and collectively as the "Parties."

RECITALS

WHEREAS, Owner desires to contract for the engineering, procurement and installation services necessary to engineer, procure equipment, install, test and deliver a solar energy generation system at the Church of the Brethren, 4413 Tuckerman St, University Park, MD 20781 (the "Site");

WHEREAS, SSI is an installer of solar electric generation systems and desires to act as the contractor for the engineering, procurement, installation, testing, delivery and sale of the System to Owner in accordance with the terms of this Agreement; and

WHEREAS, Owner desires for SSI to act as the contractor to engineer, procure, install and test the System, and SSI agrees to act as the contractor to engineer, procure and install the solar electric generation system in accordance with the terms hereof.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged by the Parties, and for the mutual covenants contained herein, the Parties hereby agree as follows:

ARTICLE I - WORK

Section 1.1 - General Description of the Work

SSI shall design, develop, engineer and construct the System, including permitting, procurement and installation of Equipment, provision of labor, materials, tools, instrumentation, testing of the Equipment, and other services, all as necessary or appropriate to design, develop, engineer, construct and test the System in accordance with the Specifications (the "Work"). The Work is described more particularly in Exhibit A.

Section 1.2 - Definitions Relating to the Work

Section 1.2.1 - For purposes hereof, "Specifications" shall mean the technical specifications set forth in Exhibit A.

Section 1.2.2 - For purposes hereof, "System" shall mean a photovoltaic electric generating system consisting of PV modules mounted on a fully attached support structure, an advanced energy inverter, a data acquisition system and related electrical conduit, wiring, meters, machinery, parts, start-up spares, special maintenance tools, components, appliances, interconnection equipment to the point of common coupling, supplies, appurtenances and other items and materials more specifically described in, and meeting the Specifications.

Section 1.2.3 - For purposes hereof, "Equipment" shall mean the primary equipment that will comprise the System, including PV modules mounted on a fully attached support structure, and an advanced energy inverter.

ARTICLE II - [INTENTIONALLY DELETED]

ARTICLE III - COMMENCEMENT OF WORK AND SCHEDULE

Section 3.1 - Commencement of Work

No later than 7 business days after the Effective Date, SSI shall commence performing the Work.

Section 3.2 - Schedule

SSI shall perform the Work in accordance with the schedule set forth in Exhibit B (the "Schedule"), and shall use commercially reasonable efforts to achieve Substantial Completion on or about June 1, 2010, subject to Force Majeure Events, unusually long lead times for components, and to adjustments due to Changes in the Work.

ARTICLE IV- PERSONNEL AND SUBCONTRACTORS

Section 4.1 - Personnel

SSI shall provide all labor and personnel required for the proper performance of the Work. SSI shall provide competent supervision for the performance of Work.

Section 4.2 - SSI's Representative

SSI's authorized representative is Jack Hachmann ("SSI's Representative"). SSI's Representative shall possess full authority to receive instructions from Owner and to act on those instructions. SSI shall notify Owner in writing of any change in the designation of, or authority granted to, SSI's Representative.

Section 4.3 - Subcontractors

Section 4.3.1 - SSI may enter into one or more subcontracts with respect to performance of the Work hereunder, including without limitation any engineering Work. SSI shall provide Owner with prior written notice identifying the subcontractors that will be performing the Work at the Site.

Section 4.3.2 - SSI shall be responsible for each of the various portions of the Work so that all items thereof conform in all respects to the requirements of this Agreement regardless of any failure of any subcontractor to perform.

Section 4.3.3 - No subcontract shall bind or purport to bind Owner.

ARTICLE V - SSI'S RESPONSIBILITIES

Section 5.1 - Control of the Work

SSI shall supervise and direct the Work at the Site using SSI's best skill and attention. SSI shall be solely responsible for the adequacy of all means, methods, techniques, sequences and procedures, for accomplishing the Work, for implementing safety precautions and programs and for coordinating all portions of the Work. SSI and its subcontractors shall at all times be responsible for the safety and security of their materials, equipment and tools.

Section 5.2 - Safety Documentation and Plan

SSI shall adopt and implement a safety program on the Site that shall be consistent with all applicable laws, rules and regulations (including, without limitation, the Occupational Safety and Health Act and all other applicable work or employment health and safety laws, rules and regulations), with good practices in the construction industry and with the safety procedures and criteria set forth in the SSI Safety Manual, which has been provided to Owner. SSI represents that the SSI Safety Manual is a document that was produced using recognized industry standards.

Section 5.3 - Quality Assurance

The design of the System shall be verified by North American Board of Certified Energy Practitioners ("NABCEP") certified solar PV installers on the SSI staff according to the design principles of NABCEP and according to the National Electrical Code and such other authorities having jurisdiction.

Section 5.4 - Access to the Site

Section 5.4.1 - SSI acknowledges that its access to and use of the Site will not be unlimited or uninterrupted, and that such access and use shall be subject to the other requirements of Owner. SSI and its subcontractors and their respective personnel shall occupy and use the Site only to the extent reasonably necessary for the performance of the Work in accordance with the provisions of this Agreement.

Section 5.4.2 - SSI acknowledges that Owner will continue Owner's operations at the Site during the progress of the Work. Accordingly, SSI shall arrange and schedule the Work so as not to interfere with the operations of Owner or Owner's other contractors to the extent reasonably possible. If any of the Work shall necessitate interference with the operations of Owner or Owner's other contractors, SSI shall notify Owner of such interference in advance, stating the location and the approximate length of time the interference will exist.

Section 5.5 - Cleaning Up

SSI shall regularly remove debris and waste materials at the Site resulting from the Work. Prior to discontinuing Work in an area, SSI shall clean the area and remove all rubbish and its construction equipment, tools, machinery, waste and surplus materials. SSI shall minimize and confine debris resulting from the Work. At the completion of the Work, SSI shall remove from the Site all construction equipment, tools, surplus materials, waste materials and debris.

ARTICLE VI - SITE CONDITIONS

Section 6.1 - Site Visit

SSI acknowledges that as of the Effective Date it has visited the Site to visually inspect the general and local conditions that could affect the Work.

Section 6.2 - Concealed or Unknown Site Conditions

If the conditions at the Site are (a) subsurface or other physical conditions that are materially different from those indicated in the documents required to be provided by Owner to SSI pursuant to Section 8.5; or (b) unusual or unknown physical conditions that are materially different from conditions visually observed pursuant to Section 6.1 or ordinarily encountered and generally recognized as inherent in the Work provided hereunder, then SSI shall stop performing the Work and give immediate written notice of such condition to Owner. SSI shall not be required to perform any Work relating to such unknown condition without the written agreement of the Parties. Any Change in the Contract Price or the Schedule as a result of such concealed or unknown condition shall be determined as provided in Article XI.

Section 6.3 - Environmental Conditions

Section 6.3.1 - Owner shall be responsible for any environmental conditions that affect or increase the cost of SSI's prosecution of the Work, including any hazardous or non-hazardous materials on the Site, that are present as of the Effective Date and that may need to be removed in order to begin or complete the Work. Owner shall remove, or cause the removal of, such environmental conditions that may affect the Work and bear the entire expense therefore, either through other contractors or through a Change Order issued pursuant to this Agreement.

Section 6.3.2 - SSI shall be responsible for any environmental conditions that affect or increase the cost of SSI's prosecution of the Work that are solely the result of SSI's or its subcontractors' operations on the Site, including releases of hazardous and nonhazardous materials on the Site. SSI shall bear the cost of any delays associated with remedying any such environmental condition except to the extent SSI demonstrates that the cost of such remedial action or any resulting delay was increased due to the presence of an environmental condition that existed as of the Effective Date or that was caused by the subsequent acts or omissions of Owner.

ARTICLE VII - SUBSTITUTIONS

Section 7.1 - System Plans and Specifications

Notwithstanding the Change Order provisions set forth in Article XI, SSI reserves the right to make changes that will not have a material effect on the Schedule or the Contract Price, subsequent to the Effective Date of this Agreement, in the System plans and Specifications for the purposes of mechanical installations, building code and Site requirements, and reasonable design improvements.

Section 7.2 - Materials

SSI shall have the right to substitute similar materials of substantially equivalent quality to any materials that may be specified in the Specifications.

ARTICLE VIII - OWNER RESPONSIBILITIES

Section 8.1 - Information and Work

Any information or services to be provided by Owner shall be provided in a timely manner so as not to delay the performance of the Work.

Section 8.2 - Owner's Representative

Owner's authorized representative is David Brosch ("Owner's Representative"). Owner's Representative shall possess full authority to act on behalf of Owner. Owner shall notify SSI in writing of any change in the designation of, or authority granted to, Owner's Representative.

Section 8.3 - Owner Cooperation

Section 8.3.1 - Owner shall cooperate with SSI in obtaining, and where required Owner shall obtain directly, all requisite licenses, permits and approvals necessary for the engineering, installation and completion of the System in a timely fashion and in accordance with the Schedule.

Section 8.3.2 - In the event SSI provides Owner with information to be reviewed or materials to be completed, in either case where such information or materials are required for SSI to file an application for a license, permit or approval necessary for the engineering, installation and completion of the System, Owner shall provide the requested information or materials to SSI within a reasonable time of Owner's receipt thereof from SSI, but in no event more than 5 days following Owner's receipt.

Section 8.4 - Location of and Access to the Site

Owner shall provide reasonable, non-exclusive rights of ingress and egress for SSI and all subcontractors and suppliers in accordance with the Schedule, to and from the Site, any easements to the Site, and the installation laydown areas.

Section 8.5 - Site Information

To the extent Owner has obtained, or is required elsewhere in this Agreement to obtain, the following Site information, Owner shall provide to SSI at Owner's expense and with reasonable promptness:

Section 8.5.1 information describing the physical characteristics of the Site, including surveys, as-builts, Site evaluations, legal description, data or drawing depicting existing conditions, subsurface and environmental studies, reports and investigations;

Section 8.5.2 tests, inspections and other reports dealing with environmental matters, hazardous material and other existing conditions, including structural, mechanical and chemical tests, required by this Agreement or by law; and

Section 8.5.3 any other information or services requested by SSI that are relevant to SSI's performance of the Work and under Owner's control.

SSI shall be entitled to rely on Site information furnished by Owner pursuant to this Section 8.5.

Section 8.6 - Maintenance of Roof, Existing Roof Warranty and Site Maintenance

Owner shall be responsible for maintaining the Site, including the roof and the existing roof warranty, and any additional costs as may be required to maintain the Site, including the roof and any existing roof warranty. SSI will not be responsible for making any necessary repairs to, or determining the remaining useful life of, the roofing or any other materials at the Site as part of the Work.

Section 8.7 - Financial Information and Credit Requirements

Section 8.7.1 - Prior to commencement of Work and thereafter at the written request of SSI, Owner shall provide SSI with evidence of System financing. SSI shall be notified prior to any material change in System financing.

Section 8.7.2 - Owner shall maintain the same or better credit profile during the term of this Agreement as at the Effective Date, unless agreed otherwise in writing by SSI. SSI shall be notified immediately upon any material change in Owner's credit profile.

Section 8.8 - Mechanics and Construction Lien Information

Within seven (7) days after receiving SSI's written request, Owner shall provide SSI with the information necessary to give notice of or enforce mechanics lien rights and, where applicable, stop notices. This information shall include Owner's interest in the real property on which the System is located and the record legal title.

ARTICLE IX - COMPLETION OF WORK

Section 9.1 - Owner Access to System during Work

Upon reasonable advance notice to SSI and subject to compliance with SSI's reasonable safety requirements, Owner shall have access to (a) the System wherever it is in preparation and progress; and (b) the Site, at all hours of each day during each stage of construction, start-up, testing and completion of the System. Owner shall defend, indemnify and hold SSI and its officers, directors, employees, subcontractors and agents harmless from and against any and all liabilities, claims, injuries or death, property damage, fines or penalties to the extent arising out of or in connection with Owner's or its representative's negligence, recklessness or willful misconduct during the course of such access. Owner shall also be entitled to maintain a Site staff to familiarize itself with the progress and quality of the Work, to determine if the Work is proceeding in accordance with the terms and conditions of this Agreement and to observe such tests and inspections as Owner might deem appropriate to observe.

Section 9.2 - Acceptance Tests

In accordance with the Schedule and prior to Substantial Completion, SSI shall, upon 3 days prior notice to Owner, perform acceptance tests to demonstrate that the following criteria have been met (the "Acceptance Tests"):

Section 9.2.1 equipment and wiring conforms to the Specifications;

Section 9.2.2 the System is sending power to the breaker box as evidenced by the LED readout on the inverter;

Section 9.2.3 DC voltage and current measurements at the combiner boxes and at the inverter are appropriate for the amount of solar insulation and temperature;

Section 9.2.4 AC voltage and current measurements at the output of the inverter are appropriate for the amount of solar input power; and

Section 9.2.5 there are no ground faults as determined by the inverter.

Section 9.3 - Substantial Completion

Section 9.3.1- "Substantial Completion" shall mean, as certified by SSI to Owner pursuant to the Notice of Substantial Completion and accepted by Owner: (i) SSI's completion of the Work at the Site, except for Punchlist items as described in Section 9.4; (ii) successful completion of the Acceptance Tests as described in Section 9.2; [(iii) delivery of as-built drawings of the System, as-built details of equipment comprising the System;] (iv) delivery of System operational manuals; (v) delivery and assignment of all subcontractor and equipment manufacturer warranties; (vi) delivery of a notice from SSI that the System is not subject to any mechanics' lien, mechanics' lien affidavit or other claim or encumbrance in the nature of a lien; and (vii) delivery of all permits and authorizations to operate the System.

Section 9.3.2 - When SSI believes that it has achieved the requirements of Substantial Completion, SSI shall provide written notice (the "Notice of Substantial Completion"), in

substantially the same form as Exhibit D, to Owner stating that SSI has achieved Substantial Completion, together with copies of all documents that are required to be, and have not been previously, delivered to Owner to meet Substantial Completion. Owner shall have five days from receipt to review the Notice of Substantial Completion.

Section 9.3.3 - If Owner approves the Notice of Substantial Completion, Owner shall, within the five-day period set forth in Section 9.3.2:

(i) notify SSI of its approval; and

(ii) issue written notice, in substantially the same form as Exhibit D to SSI to complete the Work (the "Notice to Complete"). Owner's failure to respond to the Notice of Substantial Completion within such five-day period shall be deemed Owner's approval of the Notice of Substantial Completion.

Section 9.3.4 - If Owner has a reasonable basis not to approve the Notice of Substantial Completion because the requirements for Substantial Completion have not been met, Owner shall, within the five-day period set forth in Section 9.3.2, notify SSI of its non-approval and include a detailed explanation for the basis thereof. SSI shall promptly undertake such action or work as necessary to achieve such requirements and shall then issue another Notice of Substantial Completion to Owner stating that SSI believes that such requirements have been achieved. Such procedure shall be repeated until Substantial Completion is achieved.

Section 9.4 – Punchlist

At the time SSI delivers the Notice of Substantial Completion, SSI shall generate a list of Work, if any, which remain to be completed after Substantial Completion (the "Punchlist") and provide the Punchlist to Owner. The Punchlist shall include the proposed time limits within which SSI will complete such remaining Work.

Section 9.5 - Final Completion

Section 9.5.1 - "Final Completion" means (i) SSI's completion of the Work, including completion of any items on the Punchlist; and (ii) delivery of a notice from SSI that the System is not subject any mechanics' lien, mechanics' lien affidavit or other claim or encumbrance in the nature of a lien.

Section 9.5.2 - Upon receipt of the Notice to Complete the Work, SSI shall use commercially reasonable efforts to achieve Final Completion within 5 days of such receipt.

Section 9.5.3 - When SSI believes that it has achieved the requirements of Final Completion, SSI shall provide written notice (the "Notice of Final Completion"), in substantially the same form as Exhibit E, to Owner stating that SSI has achieved Final Completion, together with copies of all documents that are required to be, and have not been previously, delivered to Owner to meet Final Completion. Owner shall have five days from receipt to review the Notice of Final Completion.

Section 9.5.4 - If Owner approves the Notice of Final Completion, Owner shall, within the five-day period set forth in Section 9.5.3, provide written notice, in substantially the same form as

Exhibit E, to SSI certifying that SSI has achieved Final Completion in accordance with the requirements herein. Owner's failure to respond to the Notice of Final Completion within such five-day period shall be deemed Owner's approval of the Notice of Final Completion.

Section 9.5.5 - If Owner has a reasonable basis not to approve the Notice of Final Completion because the requirements for Final Completion have not been met, Owner shall, within the five-day period set forth in Section 9.5.3, notify SSI of its non-approval and include a detailed explanation for the basis thereof. SSI shall promptly undertake such action or work as necessary to achieve such requirements and shall then issue another Notice of Final Completion to Owner stating that SSI believes that such requirements have been achieved. Such procedure shall be repeated until Final Completion is achieved.

ARTICLE X - CONTRACT PRICE AND PAYMENT

Section 10.1 - Contract Price

Owner shall pay to SSI \$-----, the "Contract Price") for the proper performance of the Work, as set forth in Section 10.3. The payment terms are as follows: 30% of the Contract Price or \$----- is due at the time of signature of the Agreement, the first progress payment of 60% or \$----- is due at the time of Substantial Completion of the project as defined in Section 9.3 and the final payment of 10% or \$----- is due at the time of Final Completion as defined in Section 9.5.

Section 10.2 - Expenses under this Agreement

The Contract Price shall include expenses to assist Owner to obtain all necessary permits and authorizations to construct the System and to make net metering arrangements with the host utility under this Agreement. SSI shall pay and be responsible for the payment of all taxes, assessments, and fees arising out of the Work or SSI's other obligations under this Agreement.

Section 10.3 - Progress Payments (NOT APPLICABLE)

Section 10.3.1- On or before the 15th day of each month, SSI shall submit to Owner: (a) a summary to Owner setting forth the portion of the Contract Price allocable to earned progress against activities actually completed by SSI during the previous month (each, a "Progress Payment Summary"); and (b) an invoice for such amount (the "Invoice").

Section 10.3.2 - Owner shall have five (5) days from receipt of such Progress Payment Summary to review the Progress Payment Summary and confirm that all amounts invoiced are appropriate, which confirmation shall not be withheld unreasonably. If Owner disputes any portion of an Invoice, then Owner shall provide written notice to SSI within such five (5)-day review period, indicating the reason Owner is withholding any amount and shall pay the undisputed portion of the Invoice in accordance with this Section 10.3.

Section 10.3.3 - Owner shall pay all undisputed amounts due as reflected on such Invoice, less the Retainage (pursuant to Section 10.3.4), on or before the last business day of the month in which such Invoice was delivered. No payment by Owner of any Invoice shall be deemed

Owner's acceptance of the Work reflected thereon. The Parties shall resolve disputes relating to any Invoices in accordance with the procedures set forth in Article XX.

Section 10.3.4 - Except for the Invoice for the Final Payment (as defined in Section 10.3.5), five percent (5%) of each Invoice issued pursuant to Section 10.3.3 shall be withheld by Owner as retainage ("Retainage") with the exception of the 30% down payment.

Section 10.3.5 - Upon Owner's approval (or deemed approval) of the Notice of Substantial Completion, SSI shall prepare and submit to Owner a final Invoice for payment equal to the balance of the Contract Price not previously invoiced (the "Final Payment"), including all Retainage amounts; provided, that Owner may withhold from the Final Payment an amount equal to 150% of the value of any Work included on the Punchlist. Owner shall make the Final Payment, less any withholding for Work included on the Punchlist, to SSI within five (5) days following the delivery to Owner of the Invoice for the Final Payment.

Section 10.3.6 - Upon Owner's approval (or deemed approval) of the Notice of Final Completion, SSI shall prepare and submit to Owner an Invoice for any remaining amounts withheld by Owner pursuant to Section 10.3.5 for Work included on the Punchlist. Owner shall pay such Invoice to SSI within five (5) days following the delivery of such Invoice to Owner.

Section 10.4 - Lien Waivers

SSI shall have each subcontractor execute an affidavit and waiver of liens with respect to work done, services performed or materials or equipment furnished in connection with the Work. SSI also shall submit an executed affidavit and waiver of liens with each Invoice, as applicable. Submission of any such applicable affidavits shall be a condition of SSI's right to receive any payment.

Section 10.5 - Form of Payment

Owner shall pay any payment under this Agreement by company check.

ARTICLE XI - CHANGES TO THE WORK

Section 11.1 - Changes

Consistent with the procedures set forth in this Article, the Parties may, by issuance of a written order (each such order, a "Change Order"), [the form of which is attached hereto as Exhibit F], make certain changes to the Work (each, a "Change"), including any addition to, deletion from, suspension of or other modification to the quality, function or intent of the Work, and to the extent provided for in this Article XI, shall adjust the Schedule and/or the Contract Price and any other affected provision herein, as applicable. Changes to the Work may only be made by Change Orders issued in accordance with this Article XI.

Section 11.2 - Changes Initiated by SSI

As soon as SSI becomes aware of any circumstances that SSI has reason to believe may affect the progress of the Work or the performance of the System and thereby necessitate a Change,

SSI, within five (5) business days of becoming aware of such circumstance, will issue to Owner a written request (each such request, a “Change Order Request”). Change Order Requests shall include documentation reasonably sufficient to enable Owner to determine, as applicable, (a) the factors necessitating the possibility of a Change, (b) the impact the Change is likely to have on the Contract Price, if any, (c) the impact the Change is likely to have on the Schedule and (e) such other information as Owner may reasonably request in connection with such Change. Owner may, but shall not be obligated to, issue a Change Order pursuant to a Change Order Request.

Section 11.3 - Changes Initiated by Owner

If Owner desires to make a Change constituting a modification to the System or to the scope of the Work, it will first submit a written notice (each such notice, a “Change Order Notice”) to SSI.

Section 11.3.1 - If such Change would not adversely affect:

- (i) the amount of Output the System is capable of producing,
- (ii) the validity of any manufacturer’s warranty,
- (iii) in any significant respect, SSI’s warranty obligations; or
- (iv) the conditions of the Site for which SSI has assumed the cost and risk hereunder, then SSI shall be obligated to implement such Change as directed by Owner, subject to Schedule extensions and Contract Price changes made pursuant to Sections 11.4 and 11.5, respectively. For purposes hereof, “Output” shall mean the electrical energy produced by the System and delivered at the delivery point.

Section 11.3.2 - If such Change would adversely affect (i) the amount of Output the System is capable of producing, (ii) the validity of any manufacturer’s warranty, (iii) in any significant respect, SSI’s warranty obligations or (iv) the conditions of the Site for which SSI has assumed the cost and risk hereunder, then SSI shall promptly review the Change Order Notice and notify Owner in writing within a reasonable amount of time of the options for implementing the proposed Change and the estimated effect(s), if any, that each such option would have on the System, the Site, the Contract Price and the Schedule, as applicable. Based upon such information, Owner may, but shall not be obligated to, issue a Change Order making a Change based upon such Change Order Notice.

Section 11.4 - Changes Involving Schedule Extensions

To the extent that SSI reasonably demonstrates that a Change (or the event necessitating a Change) will delay SSI in complying with the Schedule, then Owner will issue the Change Order including an equitable extension of the date(s) in the Schedule.

Section 11.5 - Changes to the Contract Price

To the extent that the Party requesting the Change reasonably demonstrates that such Change will affect the basis for the Contract Price, then Owner will issue the Change Order including an equitable change in the Contract Price.

Section 11.6 - Change Pending Resolution of Disputes

Any dispute with respect to a Change Order shall be resolved according to the procedures set forth in Article XX. SSI shall not be obligated to implement any Change subject to dispute and, pending the resolution of such dispute, shall continue performing that portion of the Work not affected by the disputed Change to the extent practicable.

Section 11.7 - Documentation

Each Change Order shall be supported by reasonable documentation to verify the accuracy thereof.

ARTICLE XII - REPRESENTATIONS; WARRANTIES

Section 12.1 - Authorizations

SSI warrants that it holds such licenses and authorizations as are required to perform the Work and to perform its obligations under this Agreement. SSI further warrants that it will, at its own expense, keep such licenses and authorizations in force during the term of this Agreement.

Section 12.2 - Compliance

SSI warrants that it will comply with all statutes, rules, regulations, ordinances, and laws that govern the Work to be performed by SSI under this Agreement, including any conditions contained in permits relating to the Work to be performed.

Section 12.3 - Conflicts of Interest; Preferential Treatment

Each Party warrants that (a) it shall perform its obligations hereunder with integrity, ensuring at a minimum that conflicts of interest shall be avoided or disclosed promptly to the other Party; and (b) it has not and shall not pay nor receive any contingent fees or gratuities to or from the other Party, including its agents, officers, employees, subcontractors or others for whom they may be liable, to secure preferential treatment.

Section 12.4 - Warranty of the Work and the System

Section 12.4.1 - The System shall be designed, engineered, constructed and installed in a workmanlike manner using new materials and the Work shall conform in all material respects to the requirements of this Agreement (including the Specifications). The Work performed by SSI and any subcontractors and suppliers shall be and remain free from Defects in design, materials and workmanship (other than with respect to the solar panels, the inverters and the roofing

system, to the extent applicable) for a period of one year from the date of Substantial Completion.

Section 12.4.2 - For purposes hereof, "Defects" means, unless otherwise specifically stated, any design, engineering, equipment, tools, installations or other Work that do not conform materially to the Specifications or the warranties set forth in this Section 12.4 or is of improper or inferior workmanship.

Section 12.5 - Manufacturer Warranties

SSI will provide to Owner copies of the limited warranties provided by manufacturers of the PV modules, the support structure and the System inverter. Upon Substantial Completion, SSI shall deliver and assign to Owner all of its rights in and to all such manufacturer warranties. Notwithstanding the foregoing, SSI shall retain the right to administer on Owner's behalf such manufacturers' warranties during the warranty period described in Section 12.4.

Section 12.6 - Exclusivity of Warranties

THE WARRANTIES SET FORTH IN THIS AGREEMENT ARE EXCLUSIVE AND IN LIEU OF ALL WARRANTIES, EXPRESSED OR IMPLIED, OF PERFORMANCE, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, CUSTOM, USAGE OR OTHERWISE. THERE ARE NO OTHER WARRANTIES, AGREEMENTS OR UNDERSTANDINGS THAT EXTEND BEYOND THOSE SET FORTH IN THIS AGREEMENT WITH RESPECT TO THE SYSTEM OR THE WORK. NO OTHER WARRANTY, ORAL OR WRITTEN, WHICH MIGHT HAVE BEEN GIVEN BY AN EMPLOYEE, AGENT OR REPRESENTATIVE OF SSI, IS AUTHORIZED BY SSI.

Section 12.7 - Exclusions from Warranty

SSI is not and shall not be liable with respect to any breach or nonconformity with the warranties made by SSI in this Agreement to the extent that such nonconformity is due to:

Section 12.7.1 ordinary wear and tear in the operation of the System;

Section 12.7.2 alterations or repairs of the System carried out by any person, other than SSI or its subcontractors, not authorized by SSI; or

Section 12.7.3 a Force Majeure Event.

Section 12.8 – Survival

All the warranties made by SSI in this Article XII shall survive the termination of this Agreement.

ARTICLE XIII - DEFAULT; TERMINATION

Section 13.1 - Termination by Owner

Owner may terminate this Agreement: (a) upon SSI's material breach of this Agreement, if such material breach has not been cured within fifteen (15) days of notice of such material breach; provided, however, Owner shall not have a right to terminate this Agreement if such cure cannot be completed within such 15-day period and SSI has commenced such cure within such 15-day period and diligently proceeds and subsequently completes such cure within a reasonable time; or (b) if SSI voluntarily or involuntarily files or has filed against it a bankruptcy or other similar petition, enters into an assignment of its assets for the benefit of its creditors or otherwise is unable to pay its debts as they become due. In the event that Owner terminates this Agreement pursuant to this Section, SSI will assign all material contracts and all subcontractor and manufacturer warranties related to the Work and the System to Owner to the extent that such contracts and warranties are assignable.

Section 13.2 - Termination by SSI

SSI may terminate this Agreement:

- (a) upon non-payment of any undisputed part of the Contract Price when due, if such non-payment has not been cured within five (5) days of notice of such non-payment;
- (b) upon Owner's gross negligence, recklessness or intentional misconduct affecting SSI's performance of the Work hereunder;
- (c) upon Owner's material breach of this Agreement, if such material breach has not been cured within fifteen (15) days of notice of such material breach; or
- (d) if Owner voluntarily or involuntarily files or has filed against it a bankruptcy or other similar petition, enters into an assignment of its assets for the benefit of its creditors or otherwise is unable to pay its debts as they become due.

ARTICLE XIV - FORCE MAJEURE

Section 14.1 - Definition

As used herein, "Force Majeure Event" means any circumstance not within the reasonable control, directly or indirectly, of the Party affected, but only if and to the extent that:

- (a) such circumstance, despite the exercise of due diligence, cannot be or be caused to be prevented, avoided or removed by such Party;
- (b) such event is not due to such Party's negligence or intentional misconduct;
- (c) such event is not the result of any failure of such Party to perform any of its obligations under this Agreement;

(d) such Party has taken all reasonable precautions, due care, and reasonable alternative measures to avoid the effect of such event and to mitigate the consequences thereof; and

(e) such party has given the other Party prompt notice describing such event, the effect thereof and the actions being taken in order to comply with this Agreement.

Subject to the foregoing conditions, Force Majeure Events may include strikes or other labor disputes, supply shortages, adverse weather conditions and other acts of nature, subsurface conditions, riot or civil unrest, actions or failures to act of any governmental authority or agency, but shall not include any inability to make any payments that are due hereunder or to any third party or to procure insurance required to be procured hereunder.

Section 14.2 - Force Majeure Event

Section 14.2.1 - Neither Owner nor SSI shall be considered to be in default or breach in the performance of its obligations under this Agreement, to the extent that performance of any such obligation is prevented or delayed by a Force Majeure Event.

Section 14.2.2 - If a Party is prevented or delayed in the performance of any such obligation by a Force Majeure Event, then such Party shall immediately provide notice to the other Party of the circumstances preventing or delaying performance and the expected duration thereof. Such notice shall be confirmed in writing as soon as reasonably possible. The Party affected by a Force Majeure Event shall use commercially reasonable efforts to remove or repair the cause of the Force Majeure Event and shall resume performance of its obligations as soon as reasonably practicable.

Section 14.3 - Termination for Extended Force Majeure

Either Party shall be entitled to terminate this Agreement upon sixty (60) days prior written notice to the other Party if any Force Majeure Event affecting the other Party has been in existence for a period of ninety (90) consecutive days or longer, unless such Force Majeure Event ceases prior to the expiration of such 60-day period.

ARTICLE XV - TITLE; RISK OF LOSS

Section 15.1 - Clear Title

Section 15.1.1 - No Encumbrances. SSI warrants that legal title to and ownership of the System shall be free and clear of any and all liens, claims, security interests or other encumbrances when title thereto passes to Owner.

Section 15.1.2 - Passing of Title. Title to the System shall pass to Owner upon Substantial Completion. Pending the passage of title, SSI agrees to grant a security interest to Owner or its designee(s) in any of the Equipment installed at the Site to the extent that SSI has received payment of all amounts then due pursuant to Section 10.3.

Section 15.2 - SSI's Drawings

Title to all drawings, Specifications, documents, and engineering and other data furnished or to be furnished by SSI in connection with the Work shall pass to Owner upon Substantial Completion, but SSI may retain a copy of all such documents (the "Project Documents"); provided, that SSI shall retain its intellectual property rights in any drawings, Specifications, documents and engineering and other data that are proprietary to SSI; and further provided that all such Project Documents shall be used by Owner solely in connection with the operation and maintenance of the System.

Section 15.3 Transfer of Care, Custody and Control; Risk of Loss

Section 15.3.1 - SSI shall retain care, custody and control of the System, and shall exercise due care with respect thereto until the earlier of Substantial Completion or termination of this Agreement.

Section 15.3.2 - SSI shall bear the risk of loss with respect to the System and all equipment and materials comprising or to comprise the System, whether or not incorporated therein or located on or off the Site, until Substantial Completion.

ARTICLE XVI - MUTUAL GENERAL INDEMNITY

To the maximum extent permitted by law, each Party hereto shall defend, indemnify and hold harmless the other Party and the directors, officers, shareholders, partners, agents and employees of such other Party, and the affiliates of the same, from and against all loss, damage, expense and liability in connection with this Agreement (including court costs and reasonable attorney's fees) resulting from injury to or death of persons, and damage to or loss of real or personal property, to the extent caused by or arising out of the negligent acts or omissions of the indemnifying Party.

ARTICLE XVII - LIMITATIONS OF LIABILITY

Section 17.1 - Waiver of Certain Damages

Except to the extent otherwise specifically provided herein, neither Party nor any of their respective shareholders, members, partners, officers, directors, agents, subcontractors, vendors or employees shall be liable to the other Party or its affiliates hereunder for any consequential or indirect loss or damage arising out of this Agreement, whether such loss or damage arises in contract, tort (including negligence), strict liability, warranty, statute or otherwise, including loss of revenues, loss of profit, cost of capital, loss of goodwill, increased operating costs or any other special or incidental damages. The Parties further agree that the waivers and disclaimers set forth above shall survive the expiration or termination of this Agreement.

Section 17.2 - Limitation of Liability

Section 17.2.1 - It is specifically understood and agreed that there shall be absolutely no personal liability on the part of any of the officers, directors, employees, shareholders or members of the Parties for the payment of any amounts due hereunder, or the performance of any obligations

hereunder, and each Party shall look solely to the assets of the other Party for the satisfaction of each and every remedy of such Party in the event of any breach by the other Party. In furtherance of the foregoing, each Party agrees that it shall neither seek nor obtain, nor be entitled to seek or obtain, any deficiency or other judgment against any of the officers, directors, employees, shareholders or members of the other Party for any action or inaction on the part of any shareholder or member or its respective officers, employees, controlling persons, executives, directors, agents, authorized representatives or affiliates, and such Party therefore releases such persons from such claims.

Section 17.2.2 - Without limiting the generality of the foregoing, in no event will the aggregate liability of SSI to Owner under this Agreement exceed an amount equal to the Contract Price.

ARTICLE XVIII - RELATIONSHIP OF PARTIES

SSI is an independent contractor and this Agreement is not, and shall not be construed as, an agreement of partnership, joint venture, or employment between Owner and SSI or between Owner and any of SSI's employees or subcontractors. The equipment and personnel used by SSI in performing its obligations under this Agreement shall at all times be under the sole and exclusive control of SSI. SSI shall not create any obligation for Owner, assume any responsibility for Owner, or attempt to bind Owner in any way except as permitted by this Agreement. Except as permitted by this Agreement, SSI shall not, in any manner, represent that it is an agent of Owner or associated or affiliated with Owner in any capacity other than as an independent contractor. SSI is not authorized to enter into any contract with any person or entity on behalf of Owner and shall not represent itself as being so authorized.

ARTICLE XIX - INSURANCE

Section 19.1 - SSI Insurance Requirements

Section 19.1.1 - SSI shall procure and maintain, or shall cause its subcontractors to procure and to maintain, in full force and effect while this Agreement is in effect with responsible insurance providers (as evidenced by an AM Best rating of A-/VIII or better) the following insurance in at least the minimum amounts specified below. The procurement and maintenance of such insurance shall be at SSI's or its subcontractors' own expense.

(a) Workers' Compensation and Employers Liability. Workers' compensation insurance in compliance with appropriate federal and state laws, and Employers Liability Insurance with limit of not less than \$1,000,000 per accident or disease for each employee, and \$1,000,000 disease policy limit;

(b) Commercial General Liability. Commercial general liability insurance, occurrence form, including, but not limited to, contractual coverage for all of the provisions of this Agreement, with limits of not less than \$1,000,000 per occurrence and \$2,000,000 in the aggregate, \$2,000,000 Products and Completed Operations aggregate; \$1,000,000 Personal Injury and Advertising injury per offense;

(c) Automobile Liability. Automobile liability insurance, including vehicles owned, hired and non-owned, with a combined single limit of not less than \$1,000,000 per accident;

(d) Excess Liability. Excess liability insurance, Umbrella Form, in excess of the limits provided for in the above policies (except Workers' Compensation and Employers Liability insurance), with a limit of not less than \$5,000,000;

(e) Professional Liability. Professional Liability insurance providing "errors and omissions liability" or equivalent coverage for the work being performed, with limits of not less than \$1,000,000 per claim. If SSI subcontracts the design and engineering portion of the Work, then such design or engineering professional (or firm) shall procure and maintain the professional liability (errors & omissions) insurance required in lieu of SSI providing such professional liability insurance; and

(f) Property Insurance. During performance of the Work and until the date of Substantial Completion, SSI shall obtain and maintain, at its option, commercial property or builder's risk insurance for the Work, including the Equipment, on a full replacement cost basis. Such insurance shall name Owner and SSI as insureds, as their interests may appear, and shall name SSI as loss payee. SSI shall be responsible for any deductible for such insurance. SSI and any subcontractors shall obtain and pay for property damage insurance for SSI's and subcontractors' tools, equipment and materials.

Section 19.1.2 - Owner shall be furnished with satisfactory evidence that the foregoing insurance is in effect, and Owner shall be notified thirty (30) days prior to the cancellation or material change of any such coverage. Owner and its affiliates shall be named as additional insureds with respect to SSI's activities under this Agreement under the coverages required by Section 19.1.1. Maintenance by SSI of the insurance required herein shall in no way be interpreted as relieving SSI of any other obligations it may have under this Agreement.

Section 19.1.3 - SSI's insurance coverage shall be primary coverage without right of contribution from any other insurance carried by Owner. Insurance maintained by Owner is for the exclusive benefit of Owner and shall not inure to the benefit of SSI. All policies procured by SSI shall require the insurer to waive subrogation against Owner.

Section 19.2 - Owner Insurance Requirements

Section 19.2.1 - None

ARTICLE XX - DISPUTE RESOLUTION

Section 20.1 - Procedure

If the representatives of the Parties designated in Article XXI are unable to resolve a dispute, controversy or claim arising out of or relating to this Agreement or any breach, termination or invalidity hereof (a "Dispute") within ten business days after one Party's receipt of notice of such Dispute from the other Party, then each Party shall immediately designate a senior executive with authority to resolve the Dispute. If the senior executives do not agree upon a resolution of the Dispute within 20 days of the referral to them, either Party shall have the right

to pursue any and all remedies available under this Agreement, at law or in equity in a court of competent jurisdiction. Nothing in this Section 20.1 shall prevent the Parties from seeking relief from a court of competent jurisdiction.

Section 20.2 - Termination During Dispute

Notwithstanding the requirements of this Article XX, either Party may terminate this Agreement as provided in this Agreement or pursuant to an action at law or in equity. The issue of whether such a termination is proper shall not be considered a Dispute. Neither the giving of notice of a Dispute nor the pendency of any dispute resolution process shall extend any notice or cure period described in this Agreement or any period within which a Party must act as described in this Agreement.

Section 20.3 - Performance During Dispute

Subject to the rights of the Parties to terminate this Agreement as set forth in this Agreement, each Party shall continue to perform its obligations under this Agreement during the pendency of any Dispute. Either Party may seek preliminary and permanent injunctive relief, including specific performance or other interim or permanent relief, if the Dispute involves:

- (a) threatened or actual breach by the other Party of its confidentiality obligations under this Agreement; or
- (b) risk to the safety or security of persons or property, if in such Party's judgment such relief is necessary to prevent injury or damage. Despite any such action by either Party, the Parties shall continue to proceed in good faith to resolve the Dispute.

ARTICLE XXI - NOTICES

Any written notice, direction, instruction, request or other communication required or permitted under this Agreement shall be deemed to have been duly given on the date of receipt, and shall be delivered:

- (a) personally to the Party to whom notice is to be given;
- (b) by facsimile (confirmed by telephone) to the Party to whom notice is to be given;
- (c) by a recognized overnight delivery service, to the Party to whom notice is to be given; or
- (d) to the Party to whom notice is to be given, by first class registered or certified mail, return receipt requested, postage prepaid, and addressed to the addressee at the address stated opposite its name below, or at the most recent address specified by written notice given to the other Party in the manner provided in this Article XXI.

If to SSI:

STANDARD SOLAR, INC.
1355 Piccard Drive, Suite 300
Rockville, Maryland 20850
Attention: Jack Hachmann
Telephone: (301) 944-5120
Telecopy: (301) 944-1200
E-Mail: jackhachmann@standardsolar.com

If to Owner:

University Park Community Solar, LLC
4313 Tuckerman St
University Park, MD 20782
Attention: David Brosch
Telephone: (301) 779-3168
Telecopy: E-Mail: davidcbrosch@comcast.net

ARTICLE XXII - GENERAL PROVISIONS

Section 22.1 - Interpretation

In this Agreement, unless the context requires otherwise, the singular includes the plural and the plural the singular, words importing any gender include the other gender; references to statutes, sections or regulations are to be construed as including all statutory or regulatory provisions consolidating, amending, replacing, succeeding or supplementing the statute, section or regulation referred to; the words “including,” “includes” and “include” shall be deemed to be followed by the words “without limitation” or “but not limited to” or words of similar import; references to Articles, Sections (or subdivisions of Sections), Exhibits, Annexes or Schedules are to those of this Agreement unless otherwise indicated; references to agreements and other contractual instruments shall be deemed to include all exhibits and appendices attached thereto and all subsequent amendments and other modifications to such instruments, and references to Persons include their respective successors and permitted assigns.

Section 22.2 - Amendments

No amendments or modifications of this Agreement shall be valid unless evidenced in writing and signed by duly authorized representatives of both Parties.

Section 22.3 - Assignment

This Agreement shall not be assignable by either Party without the prior written consent of the other Party, which consent shall not be unreasonably withheld, provided, that this Agreement may be assigned:

(a) by either Party without such consent to (i) any successor of such Party, or (ii) a Person acquiring all or a controlling interest in the business assets of such Party; or

(b) by Owner without such consent as collateral in connection with any financing of the System.

Unless otherwise agreed, any assignment of this Agreement shall not relieve the assigning Party of any of its obligations under this Agreement. Operator agrees to negotiate in good faith any consent to assignment and such other documents in connection with any assignment in connection with any financing of the System, if such consent is requested by parties involved in such financing.

Section 22.4 - Successors and Assigns

This Agreement shall inure to the benefit of and be binding upon the respective successors and permitted assigns of the Parties.

Section 22.5 - No Waiver

No waiver of any of the terms and conditions of this Agreement shall be effective unless in writing and signed by the Party against whom such waiver is sought to be enforced. Any waiver of the terms hereof shall be effective only in the specific instance and for the specific purpose given. The failure of a Party to insist, in any instance, on the strict performance of any of the terms and conditions hereof shall not be construed as a waiver of such Party's right in the future to insist on such strict performance.

Section 22.6 - Survival

Any provisions necessary to give effect to the intent of the Parties hereunder after the termination or expiration of this Agreement shall survive the termination or expiration of this Agreement.

Section 22.7 - Rights and Remedies

Except where this Agreement expressly provides to the contrary, the rights and remedies contained in this Agreement are cumulative and not exclusive of any rights and remedies provided by law.

Section 22.8 - Headings

The headings in this Agreement have been inserted for the purpose of convenience and ready reference. They do not purport to, and shall not be deemed to, define, limit, or extend the scope or intent of the clauses to which they pertain.

Section 22.9 - Severability

If and for so long as any provision of this Agreement shall be deemed to be judged invalid for any reason whatsoever, such invalidity shall not affect the validity or operation of any other provision of this Agreement except only so far as shall be necessary to give effect to the installation of such invalidity, and any such invalid provision shall be deemed severed from this Agreement without affecting the validity of the balance of this Agreement.

Section 22.10 - Compliance with Laws

In performance of their respective obligations under this Agreement, each Party agrees to comply with all applicable laws, statutes, rules, regulations, judgments, decrees, injunctions, writs and orders, and all interpretations thereof, of all governmental authorities having jurisdiction over such Party.

Section 22.11 - Governing Law; Jurisdiction; Waiver of Jury Trial

Section 22.11.1 - This Agreement shall be governed by construed and enforced in accordance with the laws of the state of Maryland, without regard to choice of law provisions. The Parties hereby consent and submit to the personal jurisdiction of the courts of the state of Maryland.

Section 22.11.2 - EACH OF OWNER AND SSI HEREBY WAIVES ITS RESPECTIVE RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THIS AGREEMENT OR ANY DEALINGS BETWEEN THEM RELATING TO THE SUBJECT MATTER OF THIS TRANSACTION. OWNER AND SSI ALSO WAIVE ANY BOND OR SURETY OR SECURITY UPON SUCH BOND WHICH MIGHT, BUT FOR THIS WAIVER, BE REQUIRED. THE SCOPE OF THIS WAIVER IS INTENDED TO BE ALL ENCOMPASSING OF ANY AND ALL DISPUTES THAT MAY BE FILED IN ANY COURT AND THAT RELATE TO THE SUBJECT MATTER OF THIS TRANSACTION, INCLUDING CONTRACT CLAIMS, TORT CLAIMS, BREACH OF DUTY CLAIMS, AND ALL OTHER COMMON LAW AND STATUTORY CLAIMS. THIS WAIVER IS IRREVOCABLE, MEANING THAT IT MAY NOT BE MODIFIED EITHER ORALLY OR IN WRITING, AND THE WAIVER SHALL APPLY TO ANY SUBSEQUENT AMENDMENTS, RENEWALS, SUPPLEMENTS, OR MODIFICATIONS TO THIS AGREEMENT. IN THE EVENT OF LITIGATION, THIS AGREEMENT MAY BE FILED AS A WRITTEN CONSENT TO A TRIAL BY THE COURT.

Section 22.12 - Counterpart Execution

The Parties may execute this Agreement in counterparts, which shall, in the aggregate, when signed by both Parties constitute one and the same instrument; and, thereafter, each counterpart shall be deemed an original instrument as against any Party who has signed it.

Section 22.13 - No Confidentiality Regarding Tax Structure or Treatment

Notwithstanding anything to the contrary set forth herein or in any other agreement to which the Parties are parties or by which they are bound, the obligations of confidentiality contained herein and therein, as they relate to the transaction, shall not apply to the U.S. federal tax structure or U.S. federal tax treatment of the transaction, and each Party (and any employee, representative, or agent of any Party hereto) may disclose to any and all persons, without limitation of any kind, the U.S. federal tax structure and U.S. federal tax treatment of the transaction. The preceding sentence is intended to cause the transaction not to be treated as having been offered under conditions of confidentiality for purposes of Section 1.6011-4(b)(3) (or any successor provision) of the Treasury Regulations promulgated under Section 6011 of the Code and shall be construed in a manner consistent with such purpose. In addition, each Party acknowledges that it has no

proprietary or exclusive rights to the tax structure of the transaction or any tax matter or tax idea related to the transaction.

Section 22.14 - Entire Agreement

This Agreement, including all attachments hereto (all of which are incorporated by reference herein), constitutes the entire agreement between the Parties relating to the subject matter hereof and supersedes and replaces any provisions on the same subject contained in any other agreement among the Parties, whether written or oral, prior to the Effective Date.

IN WITNESS WHEREOF, each of the Parties has caused this Agreement to be duly executed and delivered by its duly authorized officer as of the Effective Date.

University Park Community Solar, LLC

By: _____

Name: David Brosch

Title: _____

STANDARD SOLAR, INC.

By: _____

Name: Scott Wiater

Title: President

EXHIBIT A - SYSTEM DESCRIPTION AND SPECIFICATIONS

System Description

SSI will install a ---- KW system consisting of ----- (--) solar panels on the sloped roof of the Church of the Brethren building located at 4413 Tuckerman Street, University Park, MD. The system uses three SMA Sunny Boy inverters configured to provide 240 volt AC current.

The solar array is located on the trapezoidal roof at the East end of the South roof. The roof is 92 feet long on the top edge and 72 feet long on the bottom edge and 28 feet wide. The array layout is presented on the accompanying CAD drawing named PV1.

The panels are mounted on rails that are attached to the roof with L feet bolted to the rafters below and flashed according to the best roofing practices. Engineering calculations for a similar installation calculated a loading of less than 5 lbs/ft² over the array which included wind loading, panel, racking, and ballast weights. The roof of the church is being replaced and so the installation of the L feet will be coordinated with the roofing company to maintain roof warranty.

The panels in the array are connected in strings of 11 panels and several strings are connected to each SMA Sunny Boy inverter. The strings for each inverter are combined in combiner boxes that are located on the roof rack to the right of the first row of panels on each roof. Wiring enclosed in conduit will run along the roof and over to the edge of the brick wall where the conduit will go over the edge and penetrate through the wall into the utility room. The conduit passes through the wall through a sleeve that is flashed and filled with waterproofing caulk according to accepted roofing practices. The conduit runs along the interior wall of the building for a few feet to the inverters. The exact location of the inverters will be determined at the Design Walk-Through Meeting after the contract has been signed.

Wires in conduit run from the inverter to the building circuit breaker box (station service panels) through AC disconnect switches mounted on the outside wall of the building near the utility meter. The output of one of the inverters is connected to the house next door to the church and therefore wires in conduit will be run between the buildings.

The system is connected to a Data Acquisition System (DAS) which monitors the performance of the inverter and generates reports and troubleshooting emails via an Internet based web page. The DAS is connected to the Internet via a Customer supplied network interface.

Specifications

1. Photovoltaic System
2. Photovoltaic Modules
3. DC Wiring J-Box Consolidation Point
4. Mounting Rack
5. Grid Tie Inverter
6. System Monitoring
7. Accessories

Project cut sheets are attached to this document.

Array Layout Drawing

The array layout CAD drawing is attached to this document and is named PV1.

EXHIBIT B - SCHEDULE OF WORK

If the date of the Contract is April 14, 2010 then the Substantial Completion Date for the work is estimated to be May 31, 2010. The concurrent tasks are presented below.

Design (1 week)

- Engineering and Construction Site Visit
- Design Development
- Design Review
- Roof and Structural Analysis
- Interconnection Application

Permitting (1 – 2 weeks)

- Permit Submission
- Permit Processing
- Permit Issued

Notice to Proceed (1 week)

- Final Design Approval
- Delivery of Schedule of Work
- Kick-Off Meeting
- Notice to Proceed Issued

Material Procurement (3 - 4 weeks)

- Modules
- Inverter
- Structure Materials
- Meter and Monitoring
- Balance of System (“BOS”)

Construction (1 -2 weeks)

- Pre-Construction Meeting
- Mobilization
- Safety Setup
- Roofing / Groundwork
- Array Assembly Install
- Electrical Install
- Metering and Monitoring Install
- Performance and Commissioning Tests

Inspections (1-2 weeks)

- Building Inspection
- Utility Inspection

- Customer Walkthrough
- Punch List Developed
- Interconnection Approval
- Issue Certification of Substantial Completion

Final Completion (1-2 weeks)

- Punch List Items Complete
- Final Customer Walkthrough
- System Training
- Delivery of As Built Drawings, Manufacturer Warranties and Operational Manuals
- Transfer of Custody and Control
- Issue Certification of Final Completion

EXHIBIT C – SAMPLE FORM OF INVOICE

The Invoice Form is included as an Attachment.

**EXHIBIT D - SSI NOTICE OF SUBSTANTIAL COMPLETION AND OWNER NOTICE
TO COMPLETE**

PROJECT NAME: _____

PROJECT ADDRESS: _____

PROJECT NUMBER. _____

The Work under that certain Solar Energy Generation System Engineering, Procurement and Construction Agreement (the “Agreement”), executed on February 1, 2010 by and between University Park Community Solar, LLC (“Owner”) and Standard Solar, Inc. (“SSI”), have been reviewed and found to be substantially complete in accordance with the Agreement. The date of Substantial Completion is hereby established as _____. All capitalized terms used, but not defined, herein shall have the meaning ascribed to them in the Agreement.

SSI’s obligations under the Agreement are substantially complete. A list of items to be completed or corrected by SSI is identified in the Punchlist, which is appended hereto. Signing of this notice of Substantial Completion by the Owner in no way alters the responsibility of SSI to complete the Work in accordance with the Agreement.

SSI: _____

By Authorized Representative: _____

Title: _____

Date: _____

SSI is hereby provided with Notice to Complete the Work in accordance with the Agreement. Owner accepts the Work as substantially complete, acknowledges the date of Substantial Completion as set forth above and accepts custody and control of the System.

Owner: _____

By Authorized Representation: _____

Title: _____

Date: _____

EXHIBIT E - NOTICE OF FINAL COMPLETION

PROJECT NAME: _____

PROJECT ADDRESS: _____

PROJECT NUMBER. _____

The Work performed under that certain Solar Energy Generation System Engineering, Procurement and Construction Agreement (the "Agreement"), executed on February 1, 2010 by and between University Park Community Solar, LLC ("Owner") and Standard Solar, Inc. ("SSI"), have been reviewed and found to be fully complete, satisfactory and acceptable in accordance with the Agreement. The date of Final Acceptance is hereby established as _____. All capitalized terms used, but not defined, herein shall have the meaning ascribed to them in the Agreement.

SSI's obligations under the Agreement are fully complete, including all items on the Punchlist. Included herein is an Invoice for any amounts due SSI for the completion of any Work included on the Punchlist due at Final Completion, as provided in the Agreement.

SSI: _____

By Authorized Representative: _____

Date: _____

Owner accepts the Work as fully complete, satisfactory and acceptable in accordance with the Agreement.

Owner: _____

By Authorized Representative: _____

Date: _____

EXHIBIT F – CHANGE ORDER

Project Name:	Date:
Project Number:	
SSI:	Owner:
The following change is ordered in accordance with Article XI of the Solar Energy Generation System Engineering, Procurement and Construction Agreement, executed on April 14, 2010 by and between University Park Community Solar, LLC and Standard Solar, Inc.:	
The Work described above shall increase (decrease) the Contract Price by:	\$
The Work described above shall increase (decrease) the Schedule by [] calendar days.	
The present status of the Contract Price is as follows:	
Contract Price	\$
Net Change by Change Orders	\$
Modified Contract Price	\$
Approved: SSI	Approved: Owner
By:	By:
Date:	Date:

EXHIBIT G - LIEN WAIVER FORM

The forms are included as attachments.