

MASSACHUSETTS SOLAR

Consumer Best Practices Guide



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INTRODUCTION

As solar energy gains popularity, the number of companies offering solar services has increased dramatically. Unfortunately, not all of the personnel at these businesses have adequate training or the customer service expertise needed to provide Massachusetts residents with a high-quality solar experience. Consider the following stories:

"I was coming out of my yard when three young men saw me and tried to get me to purchase a solar system. I have a No Soliciting sign on both my doors that always seems to be ignored by solar salesmen. One young man said he saw it but said they're not selling anything. Yes you are. He's supposed to return next Saturday because he just would not take no for an answer."

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"My husband and I were under the impression that the Community Solar product was going to be a savings to our electric bill. We have not seen any deductions to our electric bill. Also we would not have signed a 20 year contract. I am 84 years old! I received a bill from them for service for one month for \$137.83. We called them to cancel and they told us we couldn't. My husband called another customer service agent who didn't want to listen to our complaints."

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"The Solar Company did not meet their contractual obligation with regard to moving their solar panels to allow for us to replace our roof. More concerning, when the panels were removed by an independent contractor at our expense, he found that 7 of the 15 optimizer connectors had melted and fused together. This could have resulted in our roof catching on fire."

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"The agent of the company approached [my mother and sister] and explained that they could save money— nothing was mentioned about a twenty year contract. There is no paperwork — they signed a TABLET. Months have gone by. They received their first bill in the summer of 2021 stating they owe \$160.80... When they were signed up they were told the bill from the utility would go down, not that they would now owe an additional bill that they can't afford. They were told that she would have to pay \$200 to get out of 'the 20 year' contract (this was when she first found out about being in a 20 year contract)."

These stories (edited for privacy and clarity) are a few of the many similar complaints filed with the Massachusetts Attorney General's Office over the past decade.

The good news is that problems like these are completely preventable, and the Solar Energy Business Association of New England (SEBANE) has assembled a consortium of solar professionals to share consumer protection strategies that have proven to be effective throughout their decades of experience. The Massachusetts Solar Consumer Protection Best Practices Guide is the result of numerous roundtable discussions over the course of several months, and intends to be a practical and useful resource that will strengthen the solar industry statewide.

This guide is specifically for companies that are engaged in the sales, construction, and management of residential solar projects. It covers the entire consumer experience – from marketing to maintenance – under the three available models: customer ownership, third-party ownership, and community solar subscription.

Every satisfied solar customer becomes a solar advocate, and every professional who follows the best practices outlined in this guide is doing their part to safeguard those customers and increase demand for this invaluable renewable energy. Massachusetts is a leader in environmental sustainability, and without a robust solar economy, the Commonwealth cannot achieve its Clean Energy and Climate Plan, or its goal of net zero greenhouse gas emissions by 2050.

Protect Massachusetts consumers and the solar economy by adopting this guide.

SECTION I. SALES & MARKETING

The sales process begins when someone becomes aware of a business or product through advertising or contact with a company representative. This introduction is the first opportunity a company has to engage in a sales strategy that is honest, educational, and respectful of the consumer. Predatory marketing tactics, and deceptive or aggressive sales pitches, are counterproductive for the growth of any industry, and especially in solar because it is unfamiliar to much of the general public.

SALES TRAINING

Training is a crucial component of ensuring that a company is actively working to protect consumers. There is currently no form of licensure required to sell solar in Massachusetts, but a well-informed and confident salesperson will set up each project for success.

While each sales training may be tailored to the individual company, all programs must cover federal and state consumer protection laws. All personnel working in sales should be familiar with the following resources (see *Appendix IV. Additional Resources for links*):

- » Telephone Consumer Protection Act
- » Federal Trade Commission's Advertising and Marketing Basics
- » Massachusetts Consumer Protection Law (MA 93A)
- » Federal Unfair, Deceptive, or Abusive Acts and Practices

In addition to general regulations, the marketing and sales of solar is subject to its own industry-specific federal and state requirements, including:

- » Federal Trade Commission's Green Guides
- » MA Information for Competitive Suppliers and Electricity Brokers

If going door to door, sales personnel should also adhere to any local ordinances regarding solicitation licenses and permissible knocking hours.

Training programs should not only incorporate the best practices in this guide, they should establish a mechanism for tracking which personnel have completed the program, as well as changes to relevant federal, state, and local regulations. Existing industry certifications, such as those offered by the North American Board of Certified Energy Practitioners (NABCEP), are also a valuable resource for building a training program.

CONDUCT OF SALES PERSONNEL

To ensure a healthy relationship between a company and its customers, there are some basic rules of conduct that anyone who communicates with the public must follow, and this is particularly true of those directly selling a product or service.

Identification

Consumers should always have a clear understanding about who they're talking to and which organization they're dealing with. Inside and outside sales personnel should be trained to introduce themselves and their company immediately. If the salesperson is a subcontractor hired by a solar provider, then the consumer must be informed of this, and contact information for both companies should be included on the salesperson's identification.

Solar sales personnel should never say or imply that they are affiliated with a utility or the Commonwealth, except in cases where the company has a formal relationship with the municipality and/or state agency, such as the

SECTION I. SALES & MARKETING

Mass Clean Energy Center for their Solarize Mass program model. Even though solar companies work closely with the local utility on most projects, that does not equate to a formal partnership. Official logos of state programs or utilities must never be used on sales material unless that material comes directly from those sources.

Respect the Consumer

At all times during the sales process, personnel must conduct themselves with patience and respect. While obviously not limited to the occupation of sales, there are specific ways this golden rule manifests when engaging with potential customers:

- » Accommodate any health and safety requests made by the customer, such as wearing a face mask.
- » Provide the consumer with ample time to review any proposals, quotes, contracts, or other paperwork. A potential customer should not be expected to review a contract upon delivery or with the salesperson present, so the document should be provided either on paper or via email for the customer to read at their convenience, rather than shown on the salesperson's own tablet or other device.
- » Before signing a contract, the customer should be fully informed regarding their options for cancellation if they do sign, including Massachusetts General Law and Federal Trade Commission regulations regarding contract cancellation¹.
- » If asked to leave or end a call, the salesperson must promptly and politely do so.

Language Accommodation

If a customer does not understand the language of the salesperson or the documents in front of them, it is impossible for them to understand what they're buying. Sales personnel must be comfortable with the fact that if they are unable to communicate with someone, they should not have that person sign a contract.

Strategies for establishing reliable communication with someone who speaks a different language could include:

- » Identify a trusted friend or family member of the potential customer who understands the salesperson's language and can translate.
- » Leave educational materials in the appropriate language, as well as contact information for someone else at the company who will understand and be able to converse in the potential customer's native language.

Using a translation app on a phone or computer is not an acceptable accommodation. These programs, while adequate for some situations, cannot capture the complexity of the solar process and should not be relied upon.

Situational Awareness

Sales personnel must also be trained to be mindful of a potential customer's situational awareness. Factors such as the consumer's age and language comprehension must be taken into consideration, and a salesperson must not accept a signed contract if it is clear that the signatory does not understand the commitment they are agreeing to.

Fair Lending Regulations

Anyone who presents financing options is responsible for complying with the Equal Credit Opportunity Act, Regulation B, and other applicable anti-discrimination laws. Federal law prohibits discrimination against an applicant on the basis of:

- » their race, color, religion, national origin, sex, marital status, or age
- » all or part of the applicant's income deriving from a public assistance program
- » the applicant having in good faith exercised any right under the federal Consumer Credit Protection Act

¹ See MA General Law - Part I, Title XV, Chapter 93, Section 48, and the FTC's Cooling-Off Rule

SECTION I. SALES & MARKETING

The prohibition against credit discrimination extends to both disparate treatment (i.e. treating a credit applicant differently than other credit applicants on one of the prohibited biases mentioned above) and disparate impact (i.e. applying a factually neutral policy in a manner that has an adverse impact on credit applicants who are members of a class protected against discrimination relative to similarly situated credit applicants who are not members of that protected class).

Basic rules to remember:

- » If the financing offered involves a deferred payment portion for the federal investment tax credit, remember that not all homeowners will have enough tax liability in one year to benefit from it when it comes due. Encourage them to consult a tax advisor and consider their annual tax liability.
- » Marketing and sales practices must be the same across different geographic areas, and among different racial or ethnic groups, or by gender, age, or other protected classes.
- » Provide equal access to financing for all. Do not selectively encourage some to apply and not others.
- » Do not prioritize presenting the financing products that are more likely to benefit the company. Present the same financing options to all.
- » Only homeowners can submit a credit application. Sales personnel can build it on their device, but only a homeowner can submit it.
- » Financing dealer fees must be absorbed as overhead by companies, and never applied as a line item in customer proposals.

CONSUMER EDUCATION

For the general public, perceptions of solar energy may range from confusion about how it works to unrealistic expectations about its benefits. This makes the job of a solar sales professional particularly complex, requiring them to explain not only why their company is the best choice, but also the many intricacies of solar itself, including technology, policy, and financing. Solar salespeople must educate others about the benefits of solar and temper any overly optimistic assumptions – all while maintaining a friendly and respectful demeanor. A true balancing act!

Avoid False Claims

The pressure to close a sale can cause an untrained or misguided salesperson to make promises to consumers that they cannot keep. This strategy is both unethical and, in the long run, ineffective, resulting not only in consumer dissatisfaction but also potential legal consequences.

Common misleading or inaccurate claims that should be avoided during any stage of the process include:

- » "With solar you will no longer have an electric bill from your utility."
- » "Solar is free and won't cost you anything."
- » "The government will pay for your solar."
- » "I guarantee your system will produce xx kWh."

Any verbal statements or guarantees like the above must be documented in writing in the contract, along with any calculations or assumptions that support the statement. For example, a production guarantee or claim regarding utility bill savings should be clearly coupled with assumed system size and utility rate, as well as account for any low-income discounts the customer may already be receiving from the utility.

SECTION I. SALES & MARKETING

Utility Bills

One key aspect of solar that requires significant attention is helping consumers understand how to read their utility bill both before and after installing solar. While this may require multiple explanations, the salesperson is the first to introduce this crucial component.

Bills will vary in format and content depending on factors such as the ownership model and the utility, but a trained solar sales professional should be able to find the critical pieces of information and clearly communicate how they will be affected by solar. Topics discussed should include:

- » net metering, including allocation to other accounts in the same or other utility territories
- » utility rates and classes
- » how solar benefits will appear on the bill (if at all)
- » seasonal variation in solar production
- » electrical usage and historical trends

Discussing the utility bill is also a prime opportunity to explain the math and assumptions behind the customer's estimated energy costs and savings with solar.

Consumer Options

Massachusetts residents have several choices for pursuing solar energy, and an effective salesperson can help them understand those choices. While it is unrealistic to expect a salesperson to be an expert in a service or product their company does not provide, a well-trained solar professional should have enough understanding of the various options to be able to accurately discuss how those services or products differ from their own.

A solar salesperson should be able to describe the following subjects on at least a basic level:

- » adoption models (Purchase, Lease, Power Purchase Agreement, Community Solar Subscription)
- » financing terms
- » federal and state incentives, including tax rebates
- » any applicable municipal incentives in the case of Municipal Light Plants
- » Renewable Energy Credits (RECs)
- » Solar Massachusetts Renewable Target (SMART) Program, if applicable
- » potential taxability of incentives
- » overall installation process, including required approvals from permitting authorities, the utility, and any relevant financing partners
- » basics of solar technology, including average lifespan of the major components
- » off-grid versus grid-connected systems
- » battery storage in conjunction with solar, if applicable
- » contract termination / system decommissioning

SMART Participant Customer Disclosure Forms

The Massachusetts Department of Energy Resources (DOER) requires solar companies to complete and submit a Disclosure Form for every solar project that participates in the SMART Program. This form must be reviewed and signed by the customer, and it should always reflect the actual system design and contract details. If the design or contract changes, a new disclosure form must be provided to the customer and submitted to the DOER.

These forms serve as a mechanism for the DOER to audit a company's sales process and to make sure that customers are being adequately educated. The DOER may contact any customer who signs to confirm that they understand all of the information on the form, and by extension, the information in their contract. Companies that coach customers on how to answer DOER verification questions, or attempt to influence their answers in any way,

SECTION I. SALES & MARKETING

are breaking DOER policy. If more than three customers of a company are found to be insufficiently informed, or a company is found to be coaching customers, that company can be suspended from participation in the SMART Program.

Contract Delivery

Typically, it falls on the salesperson to deliver and explain the contract, and while they may not be able to answer every in-depth question about the project, they must have a solid understanding of key contract elements, including:

- » general contract sequence and location of various sections
- » contract term length
- » payment terms and other customer obligations
- » general scope of work
- » duration of warranties for major components and workmanship
- » maintenance responsibilities
- » performance guarantees, if applicable
- » incentives or environmental attributes ownership
- » what happens if the customer moves
- » cancellation options

If a potential customer asks a question that is outside of a salesperson's knowledge base, it is preferable to defer to other company representatives who can provide that information.

Low-Income Customers

To ensure that the benefits of solar energy reach as many Massachusetts residents as possible, the DOER has implemented increased incentives for projects for low-income solar consumers within the SMART program. Low-income residents should be treated as any other potential solar adopter, and engaging in aggressive sales tactics is unacceptable. By following the best practices outlined in this guide, companies will ensure that all Massachusetts residents enjoy a positive solar experience.

It is also important that sales personnel consider any pre-existing utility rate discounts when calculating estimated savings for people who qualify as low-income. While low-income customers may pursue utility rate discounts if eligible, if this discount is not taken into account when calculating estimated savings in general, and when sizing community solar subscriptions, the savings – if any – will be well below what the consumer is expecting.

SECTION II. SETTING EXPECTATIONS

Best practices for consumer protection continue after contract signing. It is critical that the solar provider sets realistic expectations with the customer and provides proactive communication, both during project execution and after the system is complete.

SCOPE OF WORK

Clearly defining the Scope of Work (SOW) in a contract is essential to ensuring project success. The SOW identifies deliverables by describing which services the solar company will be performing and the equipment they will provide. The SOW may also list any services and equipment the company will *not* be providing, known as exclusions.

All solar project installation contracts should include an SOW. This important element of the contract helps set expectations, protecting the customer as well as the company, in the case of customers expecting work that is outside of the normal solar process.

Changes to the Scope of Work

While the SOW is an important road map for a solar project, circumstances may require a detour, and this flexibility must also be built into the contract. A change in system size could set off a chain reaction of events that include customer notification and approval, schedule alterations, and cost adjustments. These changes must be clearly documented to help answer questions about the project that may arise in the future, and the mechanism for documenting those changes must be defined in the contract.

Any material change to the SOW, regardless of whether they affect cost, must be presented and approved by the customer. A change order document is signed by both the contractor and the customer, and describes in detail the change to the SOW, along with the reason for the change and how it will impact the cost, payment schedule, and construction schedule.

In the case of community solar, the document that sets consumer expectations is the Subscription Agreement instead of the SOW. Subscribers must be notified of any changes to the Subscription Agreement as well as any changes to the project that may impact the availability and timing of their credits.

CUSTOMER COMMUNICATION DURING PERMITTING AND INSTALLATION

The root cause of customer dissatisfaction is often poor communication. Ideally, the salesperson has set a project up for success by ensuring that the customer is fully informed and has realistic expectations regarding timeline, cost, and maintenance. Once the contract is signed, responsibility typically passes to the project manager to see that those expectations are met. However, the design, permitting, and procurement process can take several months, and even the best-informed customer can grow impatient for tangible signs of progress.

The best way to avoid upset customers is to proactively communicate. Whether it is good news, bad news, or no news, project managers should reach out regularly to inform customers of project status.

Create a Communication Plan

Creating a standardized communication plan is a highly effective strategy to ensure that customers feel confident in a company and its ability to deliver on its promises. Below are recommendations from SEBANE on how to create and implement a successful project communication plan.

Identify Key Events

SECTION II. SETTING EXPECTATIONS

Once a contract is signed, project managers should outline the key project milestones with the customer and let them know that they will be notified when these milestones are accomplished. The time between milestones may be too long for some customers to feel comfortable, so solar providers should also identify a minimum timespan between updates regardless of milestone achievement.

Be Clear and Concise

Getting into the nitty-gritty details of the solar design, procurement, and permitting process might be fun for some technically-minded customers, but most of the time companies will want to keep updates simple and at a high level.

Communication Method

Companies should establish whether a customer prefers phone calls, text messages, emails, or even US mail updates.

Leverage Technology Where Appropriate

Companies should consider using a customer management software to enable automation of some communications.

Specific Community Solar Recommendations

Community solar providers should also establish a schedule of project updates, and make sure those updates occur often enough to keep customers fully informed. These messages are an excellent opportunity to reinforce customers' solar education and prevent confusion once the system is operational, such as reminding them about topics like how their utility bills will change and how to pay for their subscription.

ADDITIONAL PROJECT STAKEHOLDERS

Customers are not the only people a company should communicate with during project implementation. Nor are they the only ones who benefit from a high-quality solar experience. Solar projects are complex, with multiple stakeholders who have a vested interest in project execution. While some are more directly involved than others, solar companies should be aware of all of them.

Here is a partial list of key stakeholders, with a few of the ways they can impact, and are impacted by, a well-implemented solar project:

SECTION II. SETTING EXPECTATIONS

STAKEHOLDER	IMPACT ON SOLAR PROJECT	IMPACTED BY SOLAR PROJECT
System Owner - Homeowner	design, site access, schedule, installation crew morale	lower electricity bills, reduced carbon footprint, increased home value, financial gains
System Owner - Financial Investor	design, site access, schedule, energization schedule	return on investment, portfolio/revenue stability
Community Solar Subscriber	financial feasibility, administrative requirements	lower electricity bills, reduced carbon footprint
Solar Installer	design, schedule, safety, customer satisfaction, workmanship, overall system quality	customer referrals, strengthened local relationships & reputation, increased experience, revenue
Utility	design, interconnection, billing, safety regulations	renewable energy quota, ESG* goals, reputation
Building & Electrical Inspectors	permitting, schedule, code compliance	increased experience & familiarity with solar
Neighbors	design, schedule, installation crew morale	construction noise, potential future customer
Friends & Family of Energy Consumer	n/a	indirect/word of mouth referrals, potential future customers
Solar Industry / SEBANE	best practices, policy influence & advocacy	every successful solar project elevates the entire industry

*environmental, social, and governance

Scheduling Transparency

While each of the stakeholders listed above plays some role in a solar project, those who have a direct impact on the daily schedule, such as the utility and local inspectors, are the most critical. These entities perform work that is crucial to ensuring a system functions safely and productively. Unfortunately, *when* they perform that work is outside of the solar company's control. This must be clearly communicated to the customer to set realistic expectations.

SAFETY

Solar installation work is dangerous, involving electrical wiring and working at height. Solar professionals should follow all applicable safety regulations, and the best solar companies will have proven track records of safe work sites. Consumers deserve safe working practices at their homes, and are often aware of the behavior of installation professionals.

CUSTOMER SUPPORT AFTER INSTALLATION

Issues after installation are a key source of consumer complaints in Massachusetts, so companies must ensure that communication with customers continues to be a priority even after the system is switched on.

Some proven strategies for keeping customers happy throughout the life of the system include:

- » Provide timely service and system maintenance, as contracted.
- » Give the consumer a list of Frequently Asked Questions that educates them about common billing,

SECTION II. SETTING EXPECTATIONS

- monitoring, and functional issues.
- » Leave contact information so consumers can contact the company for questions or concerns that are not covered by the FAQ.
 - » Maintain an adequately staffed customer support team that is available to respond to questions in a timely manner.
 - » Provide support with online monitoring and reporting to the Production Tracking System (MassCEC PTS), if applicable.
 - » Maintain customer data privacy and require customer approval for sharing their information with third-party sources.

For third-party-owned solar energy systems, the PPA or lease billing should have clear payment terms. It should include options and responsibilities for when a homeowner moves, or if the system ownership changes. Community solar payment terms should also be clearly outlined for subscribers, with a customer support line readily available, and a streamlined process for customers to cancel or transfer their subscription.

APPENDIX I. SOLAR OWNERSHIP MODELS

Solar sales professionals should be experts on the services and products their company offers, as well as be able to provide at least a high-level comparison to differing models. This appendix summarizes common questions sales personnel should be able to answer about key aspects of each model.

CUSTOMER OWNERSHIP

TOPIC	CUSTOMER OWNERSHIP	THIRD-PARTY OWNERSHIP	THIRD-PARTY COMMUNITY SOLAR OWNERSHIP
Ownership	Who owns the system?		
Financing	How can I pay for this?	Do I have to pay if the system isn't producing electricity?	How much will the payments increase every year? Will my solar rate always be less than the utility rate?
		Will I still get a bill from the utility? How will I know if I'm saving money?	
	When are payments due? What happens if I'm late on a payment? How much will I save on my electric bill?		
RECs and SMART Incentive	Who gets the Renewable Energy Credits (RECs)? How do I sell the RECs? Who gets the SMART incentive? How long will it take for me to start receiving incentive payments?		
Taxes	Do I get a tax credit for this?		
Contract	What am I responsible for if I sign? What happens if I sell my home?		
Maintenance and Operation	What kind of maintenance is required/suggested? Will you fix the system if it breaks? Do I need to pay you extra for maintenance? What happens if I need to fix or replace my roof? Who is responsible for monitoring the system?		
Warranties	How long are the warranties on the panels/inverters/batteries? Do I need to contact the manufacturer if equipment breaks? How long is your workmanship warranty? What does your workmanship warranty cover? What if my roof leaks after the system is installed? What is covered under my home insurance warranty?		
Electricity Use	Will I be using the electricity that is created by the system?		
Performance Guarantees	How much is the system guaranteed to produce? How did you calculate the guaranteed production? How do the performance guarantee payments work? How will I know if the system isn't producing as much electricity as it should?		

APPENDIX II. CONTRACT TERMS & KEY DISCLOSURES

The following is a list of terms and key disclosures that companies should include in customer contracts under the different types of solar ownership models:

CUSTOMER OWNERSHIP

General Disclosures

- » Financing options: cash vs loan and relevant terms
- » Clarify scope of work
- » Warranties
- » O&M responsibilities
- » System performance guarantees vs projections
- » Liens or UCC-1 Filing
- » Ownership of any incentives
- » Responsibility for Insurance

Contractor

- » Contractor headquarters address
- » Contractor contact information including telephone and email
- » Contractor dispute adjudication jurisdiction
- » Contractor HIC license
- » Contractor salesperson name

Customer

- » Customer name
- » Customer full address
- » Customer utility

Assumptions

- » Customer annual electric consumption in kWh
- » Customer utility rate in dollars
- » Estimated annual electricity inflation rate
- » Any assumed O&M costs, if applicable
- » Degradation

Costs and Incentives

- » Gross turn-key price before incentives
- » Anticipated Federal tax credit % and amount
- » Anticipated State tax credit % and amount
- » Net turn-key price after incentives
- » Anticipated SMART block, duration, and rate
- » Anticipated REC duration and rate
- » Payment Terms
- » If financed, lender and key terms

PV System

- » Size in kW DC and AC
- » Estimated annual production in kWh AC
- » Module brand, model, and count
- » Inverter brand, model, and count
- » Racking brand and model

APPENDIX II. CONTRACT TERMS & KEY DISCLOSURES

- » Optional features such as additional monitoring, snow guards, critter guards, extended warranties

Storage System

- » Storage system in kWh
- » Backed up loads in home if not whole home back up

Warranties

Solar companies should provide information on the duration, terms, and recourse for the following warranties. Warranty documentation, such as serial numbers and purchase orders, should be kept in a secure location.

- » Installer (workmanship and roof)
- » Production (either through the installer or the module manufacturer if applicable)
- » Module Manufacturer (including anticipated degradation of modules)
- » Inverter Manufacturer
- » Racking System Manufacturer

THIRD-PARTY OWNERSHIP

General Disclosures

- » Financing: PPA or lease terms, and escalators if applicable
- » Obligations of third-party owner, installer, customer
- » Clarify scope of work
- » Warranties
- » System performance guarantees vs projections
- » Liens or UCC-1 Filing
- » Responsibilities regarding home sale/end of PPA/lease
- » O&M responsibilities
- » Credit transfer limitations (schedule Z, etc.)
- » Ownership of any incentives and environmental attributes
- » Responsibility for Insurance

Contractor

- » Contractor headquarters address
- » Contractor contact information including telephone and email
- » Contractor dispute adjudication jurisdiction
- » Contractor HIC license
- » Contractor salesperson name
- » Subcontractor information, if applicable

Customer

- » Customer name
- » Customer full address
- » Customer utility

Assumptions

- » Customer annual electric consumption in kWh
- » Customer utility rate in dollars
- » Estimated annual electricity inflation rate
- » Any assumed O&M costs, if applicable
- » Degradation

APPENDIX II. CONTRACT TERMS & KEY DISCLOSURES

Costs & Incentives

- » Financing structure: Power Purchase Agreement, Lease, or Prepaid Lease
- » Year 1 monthly payment amount or PPA rate
- » Annual Percentage Increase or Escalator, if applicable
- » Schedule of payments over the PPA or lease term
- » Total estimated payments
- » Deposit or Initial Payment, if applicable
- » Other fees or discounts such as ACH discount
- » Estimated system removal and reinstallation costs
- » Option to Purchase terms
- » Ownership of any applicable incentives

PV System

- » Size in kW DC and AC
- » Estimated annual production in kWh AC
- » Module brand, model, and count
- » Inverter brand, model, and count
- » Racking brand and model
- » Optional features such as additional monitoring, snow guards, critter guards, extended warranties

Storage System

- » Storage system in kWh
- » Backed up loads in home if not whole home back up
- » Ability for storage to be enrolled in programs

Warranties

Typically the solar provider will be responsible for warranty claims and maintaining the necessary documentation, but it is important to explain what warranties are included and any customer obligation.

- » Installer (workmanship and roof) or System Owner
- » Production (generally through the system owner, if any)
 - » Schedule for production guarantee evaluation
 - » Refund amount
 - » Length of production guarantee
 - » Overproduction (typically no additional cost to consumer)
- » Module Manufacturer (including anticipated degradation of modules)
- » Inverter Manufacturer
- » Racking System Manufacturer

Servicing

- » Installer (or System Owner) obligations
 - » Monitoring
 - » Repairs or replacement of equipment
 - » Warranty processing
- » Customer obligations
 - » Notification if the system needs to be removed for roof work.
 - » Modifications to the system (i.e. additional panels or inverters).
 - » Internet connection
 - » Access to system
 - » Other system concerns

APPENDIX II. CONTRACT TERMS & KEY DISCLOSURES

System Transfer or Buyout

- » Is the system transferable to the new homeowner?
 - » Applicable transfer terms such as FICO score
- » Buyout options

COMMUNITY SOLAR SUBSCRIPTION

General Disclosures

- » Upfront vs pay-as-go payment terms; fixed rate vs % discount
- » Term length and cancellation options, and fees/customer substitutional responsibilities if any
- » Relationship between customer, solar provider, and utility
- » Clear explanation of how billing works
- » Explanation that provider - not customer - can claim environmental attributes.
- » Interconnection delays or start of system expectations
- » Credit transfer limitations (schedule Z, etc.)

APPENDIX III. CONSUMER PROTECTION COMPLIANCE CHECKLIST

This checklist is designed to help solar companies track their progress in following the best practices in this guide.

- » Created a training program for our staff that includes the best practices in this guide
- » Created proper identification procedures for our staff
- » Set proper expectations with customer in the Disclosure Form and contract
- » Defined the process for making changes to the contract after it is signed
- » Identified a communication plan with customer for during construction
- » Identified a communication plan with customer for after construction
- » Considered all stakeholders during project management
- » Designed a safety plan that meets all applicable regulations
- » Other as applicable

APPENDIX IV. ADDITIONAL RESOURCES

California Solar Consumer Protection Guide (written by regulators, NOT the solar industry)

<https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/california-solar-consumer-protection-guide>

Clean Energy States Alliance, Consumer Protection for Community Solar

<https://www.cesa.org/wp-content/uploads/Consumer-Protection-for-Community-Solar.pdf>

Federal Trade Commission's Advertising and Marketing Basics

<https://www.ftc.gov/tips-advice/business-center/advertising-and-marketing/advertising-and-marketing-basics>

Federal Trade Commission's Green Guides

<https://www.ftc.gov/news-events/media-resources/truth-advertising/green-guides>

Federal Unfair, Deceptive, or Abusive Acts and Practices

https://files.consumerfinance.gov/f/documents/cfpb_unfair-deceptive-abusive-acts-practices-udaaps_procedures.pdf

Illinois Solar Education Association

<https://illinoissolar.org/Further-Resources-and-Guidance>

Interstate Renewable Energy Council

<https://irecusa.org/programs/consumer-protection/>

Low-Income Solar Policy Guide (Vote Solar)

<https://www.lowincomesolar.org/toolbox/consumer-protection/>

MA Information for Competitive Suppliers and Electricity Brokers

<https://www.mass.gov/information-for-competitive-suppliers-and-electricity-brokers>

Massachusetts Consumer Protection Law

<https://www.mass.gov/service-details/the-massachusetts-consumer-protection-law>

National Renewable Energy Lab

<https://www.nrel.gov/state-local-tribal/solar-consumer-protection.html>

SEIA Residential Consumer Guide to Solar Power

<https://www.seia.org/research-resources/residential-consumer-guide-solar-power>

Solar Massachusetts Renewable Target (SMART) Program

<https://www.mass.gov/info-details/solar-massachusetts-renewable-target-smart-program>

Telephone Consumer Protection Act

<https://www.fcc.gov/sites/default/files/tcpa-rules.pdf>

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