White Paper of the Council's Utility Advisors Regarding Community Solar and Other Shared Distributed Energy Resources

June 2018

Contents

I.	Bac	kground	1
II.	Ber	nefits from Community Solar Programs	1
III.	D	efining Success For a Community Solar Program	3
IV.	G	uiding Principles for Community Solar	1
V.	Dev	velopment of Advisors' Proposed Rules Regarding Community Solar	5
VI.	В	est Practices for New Orleans Regarding Rules for Community Solar Programs	5
А		Eligible Ownership and Participants	5
	1.	Ownership and Operation	5
	2.	Eligible Participants	3
	3.	Low Income Participation)
	4.	Type of Project/Renewable Energy Source10)
	5.	Limitations on Size of a Community Solar Facility10)
	6.	Limitation on Aggregate Amount of Community Solar	1
В	•	Program Design	2
	1.	Participants' Compensation	2
	2.	Cost of Participation	5
	3.	Portability and Transferability of Subscriptions10	5
	4.	Length of Participant Commitment	7
	5.	Treatment of Unsubscribed Capacity 17	7
	6.	Treatment of RECs	3
С	•	Safety and Reliability Protocols	3
D	•	Consumer Protections)
	1.	Contracts and Disclosures)
	2.	Unfair, Deceptive, or Abusive Acts or Practices	5
	3.	Advertising Practices	5
	4.	Marketing Practices	7
VII.	С	onclusion	7

<u>White Paper of the Council's Utility Advisors</u> <u>Regarding Community Solar and Other Shared Distributed Energy Resources</u>

June 2018

I. Background

The Council of the City of New Orleans ("Council") has long expressed an interest in encouraging the increased use of energy from renewable resources, including renewable generation resources in the City of New Orleans. The Net Energy Metering ("NEM") program that the Council established over 10 years ago has been popular and there continues to be interest in the City in increasing the penetration of rooftop solar into New Orleans and allowing utility customers to reduce their utility bills by self-generating electricity. There are many customers, however, unable to participate in NEM because they do not own a building with a suitable roof on which to install solar panels. The Advisors recommend to the Council that establishing rules to enable and govern community solar, a program whereby ratepayers are offered the opportunity to invest in a solar project in exchange for a credit on their energy bills, is one method of encouraging increased development of renewable distributed generation in the City and providing more supply options to customers.

A community solar program has been defined as a voluntary business model where multiple subscribers pay for a share of a specified solar project and receive credit on the electricity bill for their portion of the power produced.¹ It allows customers who cannot put solar panels on their own roof and participate in the NEM program to pool their resources with those of other customers to fund a solar project located somewhere else in the City to offset the energy use of their home or business.

The purpose of this white paper is to examine several of the issues related to the topic of community solar that should be resolved in any set of rules or regulations establishing a community solar program. Attached to this white paper is a set of proposed rules for review and comment by interested parties and for consideration by the Council. While this white paper attempts to thoroughly explain the reasons for the proposed rules, it may not address each and every provision of the proposed rules of interest to every party. Interested parties should be sure to review the proposed rules thoroughly when submitting any comments to ensure that they are fully aware of all proposed provisions.

II. Benefits from Community Solar Programs

Properly designed community solar projects can provide many benefits, not just to the participants in the program, but also to ratepayers and all citizens of New Orleans. Benefits that community solar programs can provide to the customers participating in the program include:

- Creating greater access to clean energy to power homes and businesses. A customer does not need to own a building with a suitable rooftop to participate, participation is open to all.
- Customers can reduce their energy bills with the bill credits received from participating in a community solar project.

¹ Smart Electric Power Alliance, Community Solar Program Design Models, 2018.

- Unlike rooftop solar on a customer's home or business, with community solar, the customer does not have to allow the installation of a facility on their roof or take responsibility for upkeep and maintenance of the facility. This results in a simpler, less complex solar opportunity for the customer.
- Community solar can be a hedge against rising energy rates. A customer may be able to lock in long term rates for solar energy that will vary less than the cost of electricity from the utility.
- Choosing community solar allows participants to demonstrate their environmental leadership.
- Community solar participation is flexible, with several options to participate in the way that makes the most financial sense.
- Community solar programs can be designed to offer benefits to low income customers.

Benefits community solar programs can provide to the Entergy New Orleans, LLC ("ENO") system and non-participating ratepayers include:

- As a community solar provider, and working with other community solar developers, ENO has greater ability to encourage the development of solar resources on local sites that will benefit the functioning of the distribution system and increase reliability.
- Potential reduction of ENO energy costs by lowering energy use at the locational marginal price ("LMP") marginal energy cost.
- Allows for greater reliance on local power in New Orleans, instead of power purchases from sources outside of the City.
- There is no upfront cost to the utility for development of local solar power, and there are economies of scale allowing projects to be developed less expensively than individual rooftop solar.
- A community solar program in New Orleans may also provide a unique opportunity to test new models of marketing, project financing, service delivery, and creative mechanisms to foster greater deployment of solar energy projects in New Orleans.

Benefits community solar programs can provide to the entire City of New Orleans include:

- Community solar projects can be sited on spaces that are not currently being used in an optimal manner, such as warehouse roofs, superfund sites, capped landfills, or other unused land. This can improve the appearance of and property values in the City and put currently unproductive spaces to good use.
- Community solar can create temporary full time construction jobs during the installation phase and long-term jobs associated with operation, maintenance, and administration of the projects. For example, in a recent proposal by ENO for a distributed generation solar project, ENO estimated that its 5 megawatts ("MW") rooftop solar project would provide 41 direct jobs and 65 total jobs in Orleans

Parish,² and approximately \$12.2 million of value added.³ In addition, the solar industry already employs more people nationwide in electricity generation than oil, coal and natural gas combined.⁴

- Community solar projects can create additional local (county, city, school) tax revenues. For example, ENO estimated that its 5 MW rooftop solar project will generate as much as \$5.4 million of total revenues for the City of New Orleans.⁵
- Community solar can help to protect the New Orleans lifestyle and environment by reducing emissions and decreasing pollution.
- Community solar can help the Council and Administration of the City meet their goals of reducing emissions New Orleans, and make New Orleans a leader in clean energy.

III. Defining Success For a Community Solar Program

Most of the literature regarding what makes a successful community solar program appears to define success primarily through the amount of MW of solar capacity installed as a result of the program. Some widely-circulated industry sources who have analyzed what makes a "successful" community solar program have determined that the drivers have less to do with the specifics of the program design and more to do with factors such as (1) an involved utility with a strong Renewable Portfolio Standard ("RPS")⁶ and/or commitment to solar resources, both utility-scale and customer owned/leased; (2) a state/regulatory jurisdiction with high electricity rates and good sunlight exposure that may also have issues with ideal solar roof types; and (3) a state with a high number of utility-scale projects and solar farms that can attract the attention of prospective third-party providers.⁷ Other industry sources point to the underlying demand from ratepayers for clean energy, and the ability for customers to see a return on their investment over the life of a community solar contract as key factors for success.⁸

While the amount of MW of solar capacity installed is certainly a legitimate measure of the success of a community solar program (indeed it would be difficult to measure success without considering this factor), the Advisors do not believe that it is the only factor that should be considered in measuring success. The Advisors believe that maximizing net benefits to participants, ENO ratepayers, and the City of New Orleans, as well as customer satisfaction and community support are also important measures of success that should be considered in program design.

² See Entergy New Orleans, Inc.'s Agreement in Principle at 5, Docket No. UD-17-05 (May 11, 2018); ENO's response to CNO 1-9 in Council, Docket No. UD-17-05.

³ See Agreement in Principle at 5; ENO's response to APC 2-1 in Council Docket No. UD-17-05

⁴ Niall McCarthy, *Solar Employs More People In U.S. Electricity Generation Than Oil, Coal And Gas Combined*, Forbes, January 15,2017, *citing* U.S. Department of Energy's U.S. Energy and Employment Report (January 2017), https://www.energy.gov/sites/prod/files/2017/01/f34/2017%20US%20Energy%20and%20Jobs%20Report_0.pdf. ⁵ See Exhibit DAO-2 and ENO's response to APC 2-1, Docket No. UD-17-05.

⁶ An RPS is a regulation that requires the increased production of energy from renewable energy sources, such as wind, solar, biomass, and geothermal. Twenty-nine states, Washington, D.C., and three U.S. territories have adopted an RPS.

 ⁷ Energy Sage: Top Community Solar States: Minnesota vs California, Massachusetts Colorado Community Solar <u>https://news.energysage.com/comparing-top-community-solar-states-minnesota-california-massachusetts-colorado/</u>.
 ⁸ Utility Dive: What makes a successful utility-led community solar program? <u>https://www.utilitydive.com/news/what-makes-a-successful-utility-led-community-solar-program/442663/</u>.

In addition to achieving these measures of success, it will be important to ensure that consumer protection and disclosures are implemented such that customers who participate in the community solar program have a clear understanding of what the program is and what to expect from it before they make the commitment to join it. The Advisors also believe that it will be important to minimize negative impacts on non-participating customers in order to strengthen community support for the program.

IV. Guiding Principles for Community Solar

New Orleans has already experienced significant penetration of residential rooftop solar through the NEM program, and the Advisors believe that a community solar program should be designed to complement the NEM program, not to compete with it or replace it. To that end, the community solar program should be designed primarily to create opportunities that do not currently exist through NEM and to appeal to customers who are not able to participate in NEM for various reasons. The Advisors have no philosophical objection to allowing customers who already participate in NEM to also participate in community solar, but the Advisors' goal and focus is to make local solar available to as many other New Orleans customers as possible, including low- to moderate-income customers. Therefore one guiding principle for the Advisors in creating proposed rules for community solar is to provide new renewable options to New Orleanians, with a particular focus on providing renewable options to those who are not eligible for rooftop solar on their own residences/business and to low-income customers.

A second guiding principle for the Advisors is that the program should be designed to allow customers to offset their own electric consumption, it should not be designed to allow customers to generate electricity for profit at the expense of their fellow ratepayers. Most state rules regarding community solar contain this restriction, and this restriction also assists in avoiding negative federal securities implications. There are legal risks associated with allowing customers to generate and sell excess power above the level of their own consumption. It raises the question of whether that customer becomes a "public utility" under the law subject to regulation by the Council. It also raises the question of whether the developer of a project allowing customers to purchase an amount of generation over and above the level needed to offset their consumption is creating a securities transaction regulated by the Securities and Exchange Commission.⁹ Limiting customer participation to a level that reflects an offset of their own energy consumption can help avoid many of these issues. In addition, where caps are in place on the aggregate size of a program, limiting customers participation to the level that corresponds to their own energy consumption ensures that more customers will be able to participate in community solar.

The Advisors believe that community solar program rules should leave as much flexibility as possible for developers to design community solar programs that they believe will be attractive to New Orleans citizens, consistent with the Council's responsibility to protect New Orleans citizens and to ensure the continued provision of safe, reliable, electric power to New Orleans at just and reasonable rates. New Orleans has a large existing population of solar providers and the Advisors believe that the market, rather than the Council, should determine which program design or designs will work best for New Orleans. This means leaving as much

⁹ See e.g., National Renewable Energy Laboratory, Shared Solar: Current Landscape, Market Potential, and the Impact of Federal Securities Regulation, Technical Report NREL/TP-6A20-63892, at vi-vii (Apr. 2015)

flexibility as possible for developers to experiment with various program designs while still ensuring that New Orleans ratepayers and the City's infrastructure are properly protected. To that end the Advisors believe the Rules should encompass the following parameters:

- The Rules should protect non-participating ratepayers from risks associated with the program. The risks borne by ratepayers participating in community solar projects should be limited to loss of the funds that they commit to invest in a community solar project. All other risks (such as liability for accidental damage, risk of undersubscription, etc.) should be borne by the developers.
- In order to ensure a level playing field, to the extent that ENO chooses to become a community solar developer, it should be required to offer the same privileges it allows itself to all other developers. ENO should not be allowed to give itself preferential treatment as a developer of a community solar project, or use ratepayer funding for its community solar projects in any manner not available to other developers.
- Developers of community solar projects should be required to meet all applicable safety and reliability protocols to ensure that the community solar projects do not pose a danger to human health and safety and the reliability of the electric grid in New Orleans.
- Because of the expectation of the citizens of New Orleans that the Council oversees the provision of electric service to them, particularly anything that may appear on their Entergy bill, consumer protection standards should be adopted to ensure that consumers are treated fairly by developers and that their dealings with developers are transparent.

V. Development of Advisors' Proposed Rules Regarding Community Solar

In order to advise the Council with respect to the development of community solar rules, the Advisors have reviewed 17 state policies/regulations,¹⁰ and research/white papers by the Interstate Renewable Energy Council ("IREC"), the Solar Energy Industries Association ("SEIA"), the National Regulatory Research Institute ("NRRI"), Department of Energy ("DOE") Sun Shot Initiative and DOE Solar Market Pathways Grant, the Solar Electric Power Association/ Smart Electric Power Alliance ("SEPA"), the National Renewable Energy Laboratory ("NREL"), Clean Energy States Alliance, The Vote Solar Initiative, the national Coalition for Community Solar Access ("CCSA"), and the Environmental Law and Policy Center. A complete list of works reviewed by the Advisors can be found in the Bibliography.

Based upon our research, the Advisors believe the following questions should be addressed by the provisions of any Council rules regarding community solar:

• <u>Eligible Project Ownership and Participants</u>: Who may own or operate a community solar project? Who is eligible to participate in the program? Are there opportunities for low income customers to participate?

¹⁰ The Advisors reviewed community solar statutes and/or regulations in the following states: California, Colorado, Connecticut, Delaware, Illinois, Maine, Maryland, Massachusetts, Minnesota, New Hampshire, New York, North Carolina, Oregon, Rhode Island, South Carolina, Vermont, Washington, and Washington, D.C.. SEPA Community Solar Program Design Models 2018 Update. SEPA Community Solar Database. Data updated as of December 31, 2017.

- <u>Eligible Projects:</u> Should eligibility be limited to solar PV projects or should a broader range of renewable and/or storage projects be included? Should there be a cap on the size of eligible projects? Should there be a cap on the aggregate amount of capacity permitted in the program?
- <u>Program Design</u>: How are participants compensated for the energy produced by the project? What do participants pay in order to invest in the project? Should there be a cap on the amount of capacity a participant may sign up for? Can participants continue to participate and transfer their bill credits to a new address if they move to a new address within the utility's service territory? Can participants transfer their share of the project and associated bill credits to another customer if they move out of the utility's service territory? What length of commitment should be required from participants? How should unsubscribed capacity be treated? How should Renewable Energy Credits ("RECs") be treated?
- <u>Protections</u>: What safety and reliability protocols should be utilized? What consumer protections are needed?

The Advisors have conducted extensive research on each of these questions and, in light of that research, recommend what we consider to be best practices for New Orleans.

VI. Best Practices for New Orleans Regarding Rules for Community Solar Programs

The Advisors have reviewed an extensive amount of material regarding community solar, including various studies, reports, and white papers as well as regulations and program designs from 17 states. The Advisors have endeavored to evaluate both what seems to be working in other jurisdictions, and what the unique characteristics of New Orleans could impact program design. In light of that analysis, the Advisors make the recommendations below regarding program design for New Orleans.

A. <u>Eligible Ownership and Participants</u>

Community solar rules should address project ownership as well as who is eligible to participate in the program. It is important to be clear about which entities may own and operate a project and which classes of ratepayers may participate in the project.

1. Ownership and Operation

States establishing community solar programs have taken different approaches regarding who may or may not own and operate a community solar project. Some states set up their community solar programs as utility projects where the utility serves as the developer and operator of the project. Others allow third-party developers to own and operate community solar projects.

IREC found that utility program administration is the predominant model for shared renewable energy programs across the US -- as of March 2013, 79% of programs were run by utilities or a utility-sponsored third-party and utilities have a considerable advantage due to their experience with complex energy projects and their administrative infrastructure (the Advisors

recognize that this is old data and may now be outdated).¹¹ Another option is for utilities to engage a third party to help develop and/or administer a shared renewables program. IREC states that the Clean Energy Collective ("CEC"), for example, has partnered with numerous utilities and community groups to develop shared solar programs, and under their typical model, customers own the shared facilities and receive bill credits based on their interest in the facility and CEC handles the administration, on-bill crediting, facility construction, operation and maintenance.¹² IREC also states that some programs have a customer-administration model, which have met with success and that under that model, the utility handles the billing and crediting.¹³ At least 22 states, Washington, D.C., and Puerto Rico explicitly authorize or at least allow for third-party ownership of renewable energy generation facilities.¹⁴ NRRI notes that an important consideration is whether utility companies will be acting as project owners and operators, or whether those functions will be assumed by third-party developers.¹⁵ NRRI states that it is likely to be different for vertically integrated states than for competitive states and that utility ownership seems more likely in vertically integrated states.¹⁶

While New Orleans is a vertically integrated jurisdiction, which would lead some observers to conclude that a utility-run program would be the most likely outcome, the Advisors believe that New Orleans does have a well-established and vibrant local solar industry and there are solar companies already doing business in New Orleans that would likely be interested in and capable of developing community solar projects. In addition, the Advisors believe that allowing third-party developers to develop community solar projects in New Orleans would encourage new companies to conduct business in New Orleans and strengthen the solar industry in New Orleans as well as the general New Orleans economy.

The Advisors also recognize that ENO already has considerable infrastructure in New Orleans that would enable it to effectively develop community solar projects. The Advisors recommend that because ENO has control of the electric distribution grid in New Orleans and access to funding through ratepayer bills, certain limitations should be imposed to prevent ENO from being able to obtain a competitive advantage over other developers due to its status as the public utility providing service to New Orleans.

Finally, the Advisors believes that there are other entities, such as landlords of large apartment buildings, or homeowners' or community associations, that may have an interest in developing a community solar project serving a particular building or neighborhood and that these could also be program designs that are interesting and beneficial to New Orleans ratepayers.

The Advisors believe that it would not be appropriate to put limitations on what entities may develop a community solar project that are based upon identity of the entity. Rather, it would be more appropriate to set criteria that ensure that any entity who undertakes a community solar project builds and operates it in a safe and reliable manner and treats customers in an

¹¹ Interstate Renewable Energy Council: Model Rules for Shared Renewable Energy Programs, at 7, <u>http://www.irecusa.org/wp-content/uploads/2013/06/IREC-Model-Rules-for-Shared-Renewable-Energy-Programs-2013.pdf.</u>

¹² *Id.* at 8.

¹³ *Id*.

¹⁴ Id. at 14.

¹⁵ NRRI, Tom Stanton, Kathryn Kline: The Ecology of Community Solar Gardening: A 'Companion Planting' Guide at 23, <u>http://nrri.org/download/nrri-16-7-community-solar/</u>.
¹⁶ Id.

honest, fair, and transparent manner. Therefore, the Advisors' recommendation on this issue is that any entity who can perform the duties set forth in the community solar rules should be eligible to participate as a developer and/or operator of a community solar project. In order to protect customers, the Advisors recommend that such entities be required to register with the Council as a Subscriber Organization and provide the Council with certain basic information, including: (1) the owner's name and address; (2) the business address; (3) the name of its registered agent in Orleans Parish; (4) general information on the facility, including location, DC and AC nameplate capacity, major equipment list, interconnection requirements, and any other relevant design details; (5) proof of liability insurance in an amount reasonably adequate to protect the public and the utility against damages caused by the operation of the facility; and (6) proof of registration "In Good Standing" with the Louisiana Secretary of State. The Advisors believe that these requirements are reasonable in that they are the minimum level of information the Council will need to ensure the safe, reliable operation of the electric grid and that, should a dispute arise regarding the operation of the facility, the Council has the information necessary to locate and contact the Subscriber Organization.

The Subscriber Organization will also have the obligation to maintain relevant records, keep its registration with the Council updated, and must abide by the Council's consumer protection rules. It will also be required to operate the facility in accordance with all applicable local, state, and federal laws, including, but not limited to, zoning, permitting, occupational safety and health, and environmental laws, rules, and regulations.

2. Eligible Participants

In most community solar programs, a mix of residential and small commercial customers participate. A recent NREL report identified as a good practice, policy constraints establishing subscription caps to avoid a situation where large commercial customers dominate community solar programs.¹⁷ The Advisors have found no convincing evidence in our research to support prohibiting any class of customers from participation in community solar. While a guiding principle of the development of the Advisors' proposal is to provide an alternative for customers not able to participate in the NEM program, the Advisors do not feel there is any need to prohibit NEM customers from participating in community solar. Rather, to the extent that any type of restriction is needed to ensure that the benefits of community solar are spread broadly across as many participants as possible, and not monopolized by large customers or by customers who are already taking advantage of NEM, the Advisors believe the approach suggested by NREL of imposing capacity limitations is a better approach.

The Advisors propose a few specific limitations on subscriptions to a community solar project that the Advisors believe will ensure that local solar is made available to as wide an array of customers in New Orleans as possible. First, consistent with the Advisors' guiding principles, no customer should be allowed to subscribe for more than 100% of their baseline annual consumption of energy. That consumption will be measured at their meter. Where the customer is also a NEM customer, and delivers generation back to ENO at that meter, its excess generation will be netted out. For example, if over the course of a year, a non-NEM customer consumes 12,000 total kWh, the customer would be eligible for a community solar subscription of up to

¹⁷ NREL Technical Report "Focusing the Sun: State Considerations for Designing Community Solar Policy," at 13 (January 2018).

12,000 kWh. Meanwhile, if NEM customer that consumed 12,000 kWh and sold 2,000 kWh back to ENO through the NEM program during the year, that customer would be eligible for a community solar subscription of up to 10,000 kWh. This would not be prejudicial against the NEM customer because it would allow the NEM customer to effectively offset 100% of their energy use through the combination of its NEM and community solar subscription.

An additional limitation the Advisors recommend in the proposed rules is that no customer should be allowed to subscribe to more than 40% of any individual community solar project's capacity. The Advisors believe that this limitation will assist in preventing very large customers from being able to monopolize community solar projects and create a greater ability for smaller customers to participate. The Advisors recognize that this may prevent some customers from being able to offset 100% of their energy use in a single project, and therefore, the Advisors do recommend that customers be permitted to have a subscription to more than one community solar project as long as their total subscription amount across all projects to which they are subscribed does not exceed 100% of their baseline annual usage.

IREC recommends a requirement that there be at least two participants for each project.¹⁸ Colorado requires at least 10, Vermont and California only require two.¹⁹ Consistent with requiring that no entity may own more than 40% of any specific project, the Advisors recommend that the Council require at least three participants for a community solar project.

3. Low Income Participation

Specific opportunities can be provided to encourage participation of low-income customers, such as waiving minimum size of participation, deposits or up-front fees (which could be guaranteed or underwritten by the utility), and setting a minimum amount of the community solar facility designated for low-income subscribers.²⁰ For example, Oregon's community solar rules provide for a low income facilitator to help engage low income customers and help meet guidelines for community solar program capacity targeted for low income. Colorado requires that utilities reserve at least 5% of their renewable energy purchases from new community solar gardens for eligible low-income participants, but it is unclear how successful this will be.²¹ Colorado also calls for each utility to set forth in its plan for acquisition of renewable resources a plan to include low-income customers as subscribers to a community solar

¹⁸ Interstate Renewable Energy Council: Model Rules for Shared Renewable Energy Programs, at 14: <u>http://www.irecusa.org/wp-content/uploads/2013/06/IREC-Model-Rules-for-Shared-Renewable-Energy-Programs-2013.pdf.</u>

¹⁹ Id.

²⁰ For example, under Colorado's Community Solar program: (1) 5% of the renewable energy purchased must be reserved for low-income subscribers and this obligation must be met through ownership of 100% low-income Community Solar Generating Facility ("CSGs"); (2) a specific amount of 100% low-income CSGs will be solicited per year (up to 4 MW/yr); and (3) 0.5 MW will be set aside for 100% low-income CSGs up to 100 kW each in capacity.

The Shared Clean Energy Facility Pilot Program being implemented in Connecticut will include in RFPs a requirement that a minimum 20 % of any CSG project should serve low-income residential households. Maryland's Rules specify a special capacity category for low-income to moderate income ("LMI") facilities, plus an additional LMI sub-category within the "small" category. Maryland has set aside 30% of its CS program for LMI subscribers. ²¹ Interstate Renewable Energy Council: Model Rules for Shared Renewable Energy Programs, at 15,

²¹ Interstate Renewable Energy Council: Model Rules for Shared Renewable Energy Programs, at 15, http://www.irecusa.org/wp-content/uploads/2013/06/IREC-Model-Rules-for-Shared-Renewable-Energy-Programs-2013.pdf.

garden and may give preference to community solar gardens with low-income customers.²² Lowering the upfront investment requirement also helps, as does better marketing.²³ IREC also recommends lowering the minimum subscription size to one solar panel to minimize barriers to entry.²⁴

NRRI reports that some states have specific goals for including low- to moderate-income consumers, some restructured states limit participation to those receiving standard offer service.²⁵ NRRI also notes that several states cap either minimums or maximums of the amount of any one project that can be dedicated to a single customer.²⁶

The Advisors propose several mechanisms to encourage participation by low income customers. First, the Advisors require that 30% of the Community Solar Capacity Limit (the aggregate capacity limit on all community solar programs in the City) be reserved for facilities that provide a minimum of 10% of their output to low-income subscribers. Second, while regular subscribers must subscribe to at least 1 kW of the community solar facility's capacity, this minimum will not apply to low-income customers, they will be permitted to subscriber to smaller amounts in order to reduce barriers to low-income participation. Finally, while Subscriber Organizations are required to apply uniform income, security deposit, and credit standards to all applicants for subscriptions, they will be permitted to apply a separate set of uniform standards for the purpose of promoting participation by low-income customers.

4. Type of Project/Renewable Energy Source

A community solar project need not be limited to solar photovoltaic ("PV"), but it could include a broader range of renewable resources or combinations thereof.²⁷ Solar PV, with or without storage or other distributed energy resource can be considered for approval by the Council. Because the Advisors anticipate that the vast majority of distributed generation in New Orleans will be solar, we have not proposed to include additional resources in this program, however, the Advisors would be interested in comments from interested parties on that topic.

5. Limitations on Size of a Community Solar Facility

Some jurisdictions have limited the size of community solar facilities/projects to 2 MW,²⁸ but the Advisors found no common industry standard limiting the size of individual installations.

²² NRRI, Tom Stanton, Kathryn Kline: The Ecology of Community Solar Gardening: A 'Companion Planting' Guide, at 20, <u>http://nrri.org/download/nrri-16-7-community-solar/</u>.

²³ Interstate Renewable Energy Council: Model Rules for Shared Renewable Energy Programs, at 15: <u>http://www.irecusa.org/wp-content/uploads/2013/06/IREC-Model-Rules-for-Shared-Renewable-Energy-Programs-2013.pdf</u>,

²⁴<u>Id.</u> at 16.

²⁵ NRRI, Tom Stanton, Kathryn Kline: The Ecology of Community Solar Gardening: A 'Companion Planting' Guide, at 20, <u>http://nrri.org/download/nrri-16-7-community-solar/</u>.

²⁶ *Id.* at 21.

²⁷ California, Massachusetts, Connecticut, Illinois, Hawaii, and New Hampshire have community shared energy/ common distributed generation programs that include as eligible resources solar, wind, and certain other renewables defined by state law, while Vermont programs also include certain other technologies defined by state law.

²⁸ Illinois, Colorado, Massachusetts (class III), New York, and Maryland specify a CSG facility limit of 2 MW; while Rhode Island and Connecticut limits facility size to 5 MW and 4 MW respectively; Oregon limits facility size to 3 MW; Minnesota and New Hampshire limit facility size to 1 MW and many other programs do not specify a limit.

Limitations on facility size may depend on location,²⁹ such as brownfields, or distribution grid considerations. Typically, projects of 500 kW or less are considered small, with real time electronic access to production data required for projects over 250 kW.

IREC initially recommended a 2 MW cap on facility size because it is large enough to maintain economies of scale both in the installed cost of the system and in the participation/marketing costs for a business engaged in developing shared renewable energy systems, and still allows for relatively low-cost interconnection on most utility distribution systems.³⁰ IREC states that it believes that smaller facilities are more likely to be able to take advantage of locations closer to load such as rooftops or brownfields, which can result in both grid and environmental benefits.³¹ IREC states it continues to believe that a 2 MW cap makes sense for some systems, but no longer includes it in their model rules because large installations may be desirable in some communities for a variety of reasons.³²

The Advisors recommend that the Council apply a 2 MW cap on the size of a facility. The Advisors agree with IREC's assessment that this size allows for economies of scale while still limiting the impact of the facility on the distribution grid and allowing for a simpler interconnection process. The Advisors also believe that in an urban service territory like New Orleans, there are likely very few sites of sufficient size to support a larger installation.

6. Limitation on Aggregate Amount of Community Solar

A recent SEPA report indicates that the average program size is steadily growing, and 30% of community solar programs have an operating capacity of 1 MW or greater.³³ For the jurisdictions reviewed, it is common to place a limit on the total capacity of all community solar projects and other renewable energy sources³⁴ related to the impact on utility system planning, including the need for back-up power sources and possible transmission/distribution grid considerations. Such limit is typically enforced by stating that no further applications for participation in the program should be accepted if the aggregate capacity has exceeded a specified percent of the utility's annual peak in MW as measured by the sum of the nameplate capacity of each project's inverter.

Because the program is new and we do not yet know how popular it will be or what impacts it would have on the distribution system in very large quantities, the Advisors believe that it would be prudent to begin the program with an aggregate cap so that it does not exceed a

²⁹ Some jurisdictions such as Maryland limit the location of adjacent CSGs: the utility may not accept a project of 500 kW or greater that is proposed to be located on the same or adjacent property as an existing or proposed project owned by the same subscriber organization or affiliate of 500 kW or greater in its service territory.

³⁰ Interstate Renewable Energy Council: Model Rules for Shared Renewable Energy Programs, at 13: <u>http://www.irecusa.org/wp-content/uploads/2013/06/IREC-Model-Rules-for-Shared-Renewable-Energy-Programs-2013.pdf.</u>

³¹ Id.

³²<u>Id.</u>

³³ SEPA Community Solar Program Design Models 2018 Update. SEPA Community Solar Database. Data updated as of December 31, 2017.

³⁴ Maryland rules limit community solar program capacity to 1.5% of 2015 Maryland peak demand, Oregon rules limit community solar program capacity to 2.5% of utility peak demand, and California limits its virtual NEM common distributed generation program to 5% of each utility's aggregate customer peak demand; Colorado and Connecticut specify a MW program limit (6 MW) while Minnesota, Hawaii, Illinois and Vermont do not specify a program limit.

certain size without the opportunity for Council review. The Advisors propose a cap for the first three years of 5% of ENO's annual peak MW. The Council would then re-examine this limit after the third year, and nothing would prevent a party from filing a request that the Council lift the cap if the 5% level is reached prior to the end of the third year of the program. The Advisors note that ENO's estimated peak in its last Integrated Resource Plan ("IRP") was 1100 MW. A 5% cap would allow for 55 MW of community solar to be installed in the City over the first three years of the program. The Advisors believe that this cap would, therefore, pose no obstacle to the goal set forth in the Administration's Climate Action Plan of installing 18 MW of distributed generation scale solar in New Orleans per year.

Along with the limitations on the aggregate size of the program, the Advisors propose a process by which the Subscriber Organizations would apply to ENO for interconnection and to be included in the program and the procedures for ENO to process those applications. The proposed rules would require ENO to submit a plan for implementing the rules and a standard interconnection agreement for the community solar program to the Council for review and approval.

B. <u>Program Design</u>

1. Participants' Compensation

IREC writes that there are two distinct categories of approaches to valuing energy produced by community solar projects.³⁵ IREC recommends the embedded cost approach based approach rooted in the retail rate in effect for each participant.³⁶ However, IREC believes that a value-based approach or other emerging approaches may be solid options for other programs, and it provides model language for both approaches.³⁷

1. Embedded cost-based approach -- based on the structure of a utility's electric rate design, including the generation, transmission, and possibly the distribution cost components of retail rates, similar to a traditional NEM bill credit. These programs have typically valued the credit based on the retail rate in effect for each participant versus at the facility location, which offers two distinct benefits. First it maintains the ability of renewable energy to act as a price hedge against future utility rate increases for a particular participant. Second it allows energy consumers whose retail rates contain a demand charge component to realize the grid benefits stemming from their participation in a shared renewables program. ³⁸ There is general consensus that bill credits should incorporate the generation cost component of a utility's retail rate, as a shared renewable facility is supplanting utility generation for a participant. The inclusion of transmission and/or distribution cost components of rates in the bill credit is more contentious. On the issue of transmission credit, depending on the structure of the program, participants might not utilize the transmission system in order to deliver power from their shared renewable energy facility, so stakeholders argue they

 ³⁵ Interstate Renewable Energy Council: Model Rules for Shared Renewable Energy Programs, at 12, http://www.irecusa.org/wp-content/uploads/2013/06/IREC-Model-Rules-for-Shared-Renewable-Energy-Programs-2013.pdf.
 ³⁶ Id.

³⁰ Id. ³⁷ Id.

 $^{^{38}}$ *Id.* at 9.

should not pay for transmission that they do not use. This argument is particularly strong in situations where a shared renewable energy facility is hosted on a participants site or on the same distribution feeder as participant. Delaware's shared renewables program rules address this by allowing participants to receive a full retail rate credit if they host or are on the same feeder as the shared renewables facility, and a lower credit if they are on a different feeder.³⁹ Inclusion of distribution charges in the credit is also controversial. In California, credits created by shared renewable facilities are valued at a fully bundled retail rate which is sensible because California's virtual net metering program is available only to occupants of multitenant buildings. Xcel's Solar Rewards Community program in Colorado, however, accounts for a participant's use of the transmission and distribution systems by backing out certain related charges from a participants' "total aggregate retail rate" bill credit, and one of the justifications argued for this is that community solar gardens could be located anywhere within Xcel's service territory, as could participants, and therefore they rely on the transmission and distribution systems.⁴⁰

- 2. Value-based approach -- The value-based approach to bill credits is based on the value of shared renewable energy generation, usually to the participants' utility and its ratepayers. This includes the value of the new generation source to the utility, and also the value of avoided transmission and distribution costs, such as system infrastructure costs and avoided line losses. Although sometimes is more difficult to calculate, some states are considering including other components in renewable energy valuation, such as avoided carbon dioxide emissions and associated costs, and improved security and resiliency in the face of natural disasters or acts of terrorism.⁴¹ Unlike the embedded cost approach, under the value-based approach, all participants get the same bill credit for the energy produced, rather than a credit which varies depending upon which rate class they are in, so a value-based credit can be easier to administer.⁴² Few utilities have utilized this approach, though more are moving towards it. The development of value of solar tariffs needs to be handled carefully to ensure that projects supported by the tariff continue to be able to clearly communicate the investment case to participants and financial institutions involved in financing the project.43
- 3. Other costs and benefits may be added to the bill credit for the energy produced, including costs of integration or delivery, exempting a participant from a renewable energy standard compliance charge, or a credit for locational benefits.⁴⁴

Some jurisdictions have treated the compensation mechanism for community solar participants the same as for rooftop solar customers.⁴⁵ In Docket No. UD-13-02, the Council examined rooftop solar net energy metering including compensation mechanisms, but the procedural schedule has been suspended at the request of ENO. Early NEM rates in the industry

³⁹ *Id.* at 9-10.

⁴⁰ *Id.* at 10.

⁴¹<u>Id.</u>

 $^{^{42}}$ <u>*Id.*</u> at 11. 43 *Id.*

Is.

⁴⁵ Department of Energy Sun Shot; "Consumer Protection for Community Solar; A Guide For the States," at 12.

credited rooftop solar customers at retail rates for simplicity and to promote the acceptance of rooftop solar. However, compensation for solar generation using retail rates (based on the utility's total embedded costs) has been revisited in several jurisdictions in recent years in favor of utility avoided costs, regional transmission organization market-based, or value-based rates⁴⁶ that are re-evaluated periodically in the jurisdiction. As a preferred basis for compensation, avoided costs, specifically corresponding energy and capacity avoided costs as defined by short run marginal cost concepts, eliminates (i) the need to rationalize the utility's total embedded costs as a solar pricing mechanism, and (ii) the difficulty to quantify and support the value-of-solar calculations.

IREC writes "NEM credits are typically valued at the participant's retail rate, such that a participant receives essentially a one-to-one kilowatt-hour (kWh) offset on their bill for energy generated by that participant's net-metered system. In contrast, the bill credit for a shared renewable energy facility may be valued through a difference process than a NEM credit. . ."⁴⁷ IREC intentionally separates community solar/shared renewables from the NEM framework to allow for program design flexibility while retaining intuitive appeal and other benefits of a bill credit mechanism to distribute the benefits of participation in a renewable energy system.⁴⁸

NRRI writes "[b]ill credits for CS production are not necessarily the same as credits for customer on-site generation participating in NEM."⁴⁹ Examples of states that are providing lower bill credits for community solar participants, as compared to customers with on-site NEM include Colorado and Massachusetts.⁵⁰ Colorado uses the on-site NEM credit, minus a reasonable charge to cover the utility's costs of delivering to the subscriber's premises the electricity generated by the community solar garden, integrating the solar generation with the utility's system, and administering the community solar gardens' contracts and net metering credits.⁵¹

If bill credits related to a participant's compensation are somewhat less than the cost of community solar participation initially, locking in a compensation rate through the program may result in participants saving as electric rates are anticipated to rise over time due to increasing utility fixed costs.⁵² For this reason the IREC recommends a monetary bill credit for shared renewables (community solar), rather than a kWh credit often used in NEM tariffs. The participants' compensation for the program should also be structured such that compensation recognizes the energy value at both the wholesale and retail levels.

The Advisors believe that bill credits for community solar projects should be considered separately from bill credits for NEM as the two different programs impose different costs and burdens on the distribution grid and offer different benefits. The Advisors propose that the bill

⁴⁶ Oregon, Minnesota and City of Austin are among jurisdictions using value of solar for bill credits. The New York Public Service Commission ordered that Value Stack compensation be based more on the value of distributed energy resources.

⁴⁷ Interstate Renewable Energy Council: Model Rules for Shared Renewable Energy Programs. at 5-6, <u>http://www.irecusa.org/wp-content/uploads/2013/06/IREC-Model-Rules-for-Shared-Renewable-Energy-Programs-2013.pdf</u>.

 $^{^{48}}$ *Id*.

⁴⁹ NRRI, Tom Stanton, Kathryn Kline: The Ecology of Community Solar Gardening: A 'Companion Planting' Guide, at 21, <u>http://nrri.org/download/nrri-16-7-community-solar/</u>.

⁵⁰ Id. ⁵¹Id.

⁵² IREC, "Model Rules for Shared Renewable Energy Programs," at 4, 6 and 9.

credits for community solar be based on the avoided energy and capacity costs and calculated as follows:

- (1) The avoided capacity, energy, and other directly quantifiable costs based on the Utility's incremental cost of providing service;
- (2) The avoided energy costs will be the previous calendar year average hourly locational marginal prices applicable to the Utility;
- (3) The corresponding avoided capacity cost, will be based on short-run marginal cost concepts, and will be the current annual fixed cost revenue requirement of a peaking unit expressed in \$/kWh based on the typical annual energy output of a solar PV installed in Orleans Parish.

NRRI writes that in reviewing bill credits, care should be taken to ascertain whether the credits are the same for community solar production which displaces monthly usage, as opposed to credits for net excess generation.⁵³ Another important variation can be whether net excess generation credits are simply carried over from month to month, or if customers are entitled to payment for net excess generation on a monthly or annual basis or when it exceeds some minimum threshold. ⁵⁴ In Massachusetts, community solar customers receive nearly the full retail rate for all measured usage during each billing period, and if there is excess generation, customers get a lower "market net metering rate" equal to about 60% of the retail rate. ⁵⁵ Delaware bases bill credits generally on supply service charges, with some differences based on whether the participant is on the same or a different distribution feeder as the generator, and further differences depending on whether there is a host facility that uses community solar energy behind the meter or if the host is a stand-alone generator.⁵⁶

The Advisors recommend that bill credits in excess of a customer's monthly usage should be rolled over from month-to-month indefinitely until the Subscriber terminates service with ENO. This will help account for seasonality in both usage and generation and ensure that a customer has the maximum opportunity to offset 100% of their baseline annual usage. However, because the goal is not to allow customers to offset more than 100% of their usage, at the time that the customer leaves ENO's service territory, ENO should not be required to pay the customer for any excess bill credits outstanding at the time of their departure.

2. Cost of Participation

The cost of participating in a community solar facility is typically based on the annual fixed costs to construct, operate, maintain, and administer the specific facility, and is often expressed as cost per kW⁵⁷ or cost per solar panel. The Advisors recommend that these fixed costs of specific community solar projects should be determined by market forces and sound business practices, and that the pricing for subscriptions to recover such cost should be competitive among the various developers and project owners applying to the Council to become part of the New Orleans Community Solar Program.

⁵³ NRRI, Tom Stanton, Kathryn Kline: The Ecology of Community Solar Gardening: A 'Companion Planting' Guide, at 21, <u>http://nrri.org/download/nrri-16-7-community-solar/</u>.

⁵⁴ <u>Id</u>. ⁵⁵ <u>Id</u>.

⁵⁶ <u>*Id.* at 22</u>. 26 Del. Admin. Code § 3001-6.0.

⁵⁷ Colorado and Minnesota specify subscription size in cost per kW.

NRRI writes that the subscription or investment rate is what a participant pays in order to become entitled to a share of a community solar project.⁵⁸ Sometimes this comes in the form of an outright purchase of a solar panel, so many dollars for a panel with nameplate rating of so many watts.⁵⁹ There are many variations on project design details and whether participants lease or own their share of the project, the amount of cash needed to participate, how it may be financed, whether on-bill financing is available and what the interest rate may be.⁶⁰ State regulated programs typically leave it to the market to establish these terms, and some require competitive bidding procedures to select community solar projects for development.⁶¹ The Advisors believe that as long as consumer protection provisions are in place, the Subscriber Organizations should otherwise be free to design whatever program they believe will be attractive to New Orleans customers.

NRRI also writes that an important factor to be addressed in community solar programs is cost recovery for utility expenses incurred, such as billing system reprogramming costs, interconnections, incremental operating costs of managing the variability of solar output, etc.⁶² Commissions will have to determine which if any costs will benefit and thus be collected from all ratepayers and which will be assigned only to the participating customers. California, Colorado, Washington, D.C., and New York have provisions for separating out the relevant costs.⁶³ When utility is the community solar project developer, it is also important to consider whether it is necessary to separate utility advertising, marketing, customer acquisition costs, managing the project (including managing customer turnover), etc.⁶⁴ The Advisors recommend that while it is appropriate for ENO to recover from ratepayers the costs of implementing any necessary changes to its billing system, and other administrative costs arising from the facilitation of bill credits for community solar, etc., if ENO chooses to participate as a Subscriber Organization, it should not be allowed to recover the Subscriber Organization-related costs for developing, advertising, marketing, customer acquisition, management of the project, etc. Such costs should be recovered solely from the subscribers of ENO's community solar project in order to prevent ENO from being able to obtain a competitive advantage over third-party developers.

3. Portability and Transferability of Subscriptions

NRRI writes that rules governing the portability (transferring your bill credit to a new address within the utility's service territory) and transferability (the ability to sell your subscription to another subscriber if you leave the utility's service territory) are helpful,⁶⁵ and that such provisions are included in the Washington, D.C., Colorado and Maryland programs.⁶⁶ The Advisors agree that it is a common provision of most community solar programs to allow

⁵⁸ NRRI, Tom Stanton, Kathryn Kline: The Ecology of Community Solar Gardening: A 'Companion Planting' Guide, at 22, <u>http://nrri.org/download/nrri-16-7-community-solar/</u>.

⁵⁹ <u>Id</u>.

 $[\]frac{60}{\underline{Id}}$.

 $^{^{61}}$ $\overline{\underline{Id}}$.

 $[\]frac{62}{1d}$ at 23.

 $^{^{63}}$ <u>*Id.* at 26</u>. 64 *Id.* at 23.

 $^{^{65}}$ <u>Id. at 25</u>.

 $^{^{66}}$ *Id.* at 23.

portability of subscriptions to a new address of a subscriber within the utility's service area,⁶⁷ providing the subscriber maintains an electric service account with the utility which will be used to continue to apply bill credits to the subscriber, and all other subscription requirements are maintained. The Advisors also find that it is best practices among community solar programs allow for subscriptions to be transferred or assigned to the associated project subscriber organization or to any other potential participant who qualifies to be a subscriber under the community solar program rules.⁶⁸ A subscriber who desires to transfer all or part of his subscription to another eligible electric utility customer would do so in compliance with the terms and conditions of the subscription contract.

The Advisors recommend that Subscribers be allowed to transfer their subscriptions to a new address within ENO's service territory and that they be allowed to sell their subscriptions to another subscriber when they leave ENO's service territory.

4. Length of Participant Commitment

The commitment to participate in a community solar program is always clearly defined in the subscription contract for a facility. Some programs require an outright purchase of a solar panel, so the term is for the life of the solar panel,⁶⁹ while other programs seek commitments of various lengths of time. Consumer surveys seem to indicate that participants favor a 5-10 year lease term as opposed to longer terms, but many utility programs have a 20-25 year term.⁷⁰ The Advisors found no best practice identifying a length of commitment, whether short periods, annual, or extended over several years, since a participant's preference for length of commitment would depend on several contract terms, present and anticipated monthly bills, subscription cost⁷¹ and projected bill credits. Subscription contracts normally include provisions for early termination and renewal of the original term of the contract. The Advisors conclude that so long as the term of the customer's commitment is set forth clearly in the contract, the customer and the Subscription Organization should be free to negotiate whatever term is mutually agreeable.

5. Treatment of Unsubscribed Capacity

Best practices among community solar programs typically provide that the electric utility pay the subscriber organization for the monthly amount of unsubscribed energy from a community solar facility at a kWh rate equal to the electric utility's average hourly incremental cost, equivalent to the average avoided energy cost of generation as reported in the utility's most recent filings providing such data.⁷² NRRI writes that some state laws, such as those in Colorado,

⁶⁷ Minnesota, Colorado, Maine, and Maryland provide for the portability of CSG subscriptions to a new address in the utility service territory.

⁶⁸ New Hampshire, Minnesota, Colorado, Maine, Maryland, Rhode Island and Vermont provide for transfer of CSG subscriptions.

⁶⁹ NRRI, Tom Stanton, Kathryn Kline: The Ecology of Community Solar Gardening: A 'Companion Planting' Guide at 22, <u>http://nrri.org/download/nrri-16-7-community-solar/</u>.

⁷⁰ <u>Id</u>.

⁷¹ For example, Westar Utility Community Solar subscriptions last for a minimum of five years and can extend to 20 years, with the rate set for the length of the initial subscription. Gulf Power community solar participants can subscribe annually (\$99) or commit to five years at \$89 a year.

⁷² In Oregon, unsold and unsubscribed generation is sold on an "as-available" basis subject to PURPA (avoided costs) and Oregon statutory requirements, unless the project manager is a utility, in which case it may seek regulatory agency approval to recover such costs from ratepayers. In New Hampshire, surplus generation is only

the Washington, D.C., Maryland, and Oregon, include provisions about unsubscribed energy, the general purpose of which is to prevent any project costs from accruing to non-participating customers while making sure operators have an incentive to keep subscriptions full.⁷³ Therefore, it is usually credited to a community solar project owner at a lower, avoided cost rate.⁷⁴ The Advisors recommend that the utility pay Subscriber Organizations for unsubscribed energy at the Utility's estimated avoided energy costs for the appropriate time period from the Utility's most recent biennial avoided cost filing with the Clerk of the Council of the City of New Orleans.

6. Treatment of RECs

IREC writes that it is important to consider who owns and receives the value for any RECs generated, IREC recommends that it stay with the participants.⁷⁵ IREC also recommends that with respect to net excess generation, credits for net excess generation should be rolled over to the participant's next bill.⁷⁶ From a customer protection standpoint, there should be disclosure requirements regarding REC ownership in marketing materials and participation forms.⁷⁷ Community Solar programs typically assign ownership and title to all renewable energy attributes or RECs associated with the community solar facilities to the individual subscribers.⁷⁸ Proposals by the subscriber organization to redeem the RECs from subscribers is acceptable and in some cases such REC proposals may offer added value to the subscribers.

The Advisors recommend that ownership and title to all RECs belong to the Subscribers. Nevertheless, the Advisors recognize that there may be occasions where a Subscriber Organization has a greater ability to monetize RECs than do individual customers, and so the Advisors recommend that Subscriber Organizations who have identified any such opportunity be permitted to make a filing with the Council proposing a plan to utilize RECs for the benefit of the Subscribers.

C. <u>Safety and Reliability Protocols</u>

Many programs have protections related to safety such as requirements to meet National Electrical Code, IEEE and UL standards, etc. IREC's Consumer Bill of Rights provides that companies, contractors and/or subcontractors shall provide proof: (a) of health and safety practices and procedures followed; (b) that licensing, bonding, and insurance requirements are

entitled to compensation at avoided cost or a default service rate. In Minnesota, the utility must purchase unsubscribed energy from facilities 40 kW or larger at an avoided cost rate. In DC, the utility must purchase any unsubscribed energy at the PJM Locational Marginal Price. The Colorado rules specify that the utility shall purchase from the CSG owner the unsubscribed renewable energy and RECs at a rate equal to the utility's average hourly incremental cost of electricity supply over the immediately preceding calendar year.

 ⁷³ NRRI, Tom Stanton, Kathryn Kline: The Ecology of Community Solar Gardening: A 'Companion Planting' Guide, at 25, <u>http://nrri.org/download/nrri-16-7-community-solar/</u>.
 ⁷⁴ Id.

⁷⁵ Interstate Renewable Energy Council: Model Rules for Shared Renewable Energy Programs, at 12: <u>http://www.irecusa.org/wp-content/uploads/2013/06/IREC-Model-Rules-for-Shared-Renewable-Energy-Programs-2013.pdf.</u>

⁷⁶ Id.

⁷⁷ NRRI, Tom Stanton, Kathryn Kline: The Ecology of Community Solar Gardening: A 'Companion Planting' Guide, at 25, <u>http://nrri.org/download/nrri-16-7-community-solar/</u>.

⁷⁸ In California, RECs associated with electricity generated and used by the customer remain the property of the customer. In Oregon, RECs are owned by subscribers, in proportion to their proportional subscription to the facility. In New Hampshire, RECs remain property of the customer until they are sold or transferred.

met; (c) that permitting and inspection requirements are met; (d) that workers are trained to industry standards and supervised; and (e) that industry-recognized credentials in good standing shall be explained and displayed.

The Washington, D.C. Act requires that a community renewable energy facility shall meet all applicable safety and performance standards and states that the Commission may adopt by rulemaking additional control and testing requirements for community renewable energy facilities that the Commission considers necessary to protect public safety and system reliability. It also requires that the owner of each community renewable energy facility follow all procedures for interconnection specified in the D.C. Municipal Regulations.

The Advisors believe that project developers/owners should be required to file an executed standard interconnection agreement with the utility, proof of all applicable permits, and proof of site control. Size and grid location should be included in utility planning before application for approval. The utility should monitor its distribution system to determine any adverse effects from each community solar facility. A long term maintenance plan should be filed with each facility application.

The Advisors also propose a requirement that the Subscriber Organization (and where relevant the third-party developer/owner) be responsible for ensuring the community solar facility is constructed, maintained, and operated in compliance with all relevant local, state and federal laws, rules and regulations, including, but not limited to, zoning, permitting, occupational safety and health, and environmental laws, rules, and regulations.

D. <u>Consumer Protections</u>

In light of the recommendation to allow a wide range of entities to act as developers for community solar projects and the general expectation that energy services provided in the City of New Orleans are supervised by the Council, the Advisors recommend that the Council adopt a set of consumer protections to ensure that when community solar opportunities are presented to consumers, they are presented in a transparent manner that ensures that consumers correctly understand the commitment they are making and what they can expect to receive in exchange for that commitment.

Many programs have protections against fraud, slamming, certain marketing practices, etc. NRRI writes that consumer information efforts are particularly important, and that notes Maryland's consumer protection policies and that Connecticut and Minnesota are in the process of developing rules.⁷⁹

The entities that have recommended and the states that have adopted consumer protection standards have generally focused on making sure that subscribers fully understand the costs and potential benefits as accurately as possible before entering into a transaction and on making sure that developers do not engage in misleading or coercive marketing practices. The Solar Energy Industries Association has issued the SEIA Solar Business Code, and requires its members to follow the code. SEIA is the national trade association of the U.S. solar energy industry with 1,000 member companies. IREC also publishes a *Consumer Bill of Rights*. IREC is a not-for-profit organization whose mission is to make clean, efficient, sustainable energy possible for more Americans through forward-thinking regulatory reform, quality workforce development

⁷⁹ NRRI, Tom Stanton, Kathryn Kline: The Ecology of Community Solar Gardening: A 'Companion Planting' Guide, at 19, <u>http://nrri.org/download/nrri-16-7-community-solar/</u>.

and consumer education. The rules set by Washington, D.C.'s City Council, which earned IREC's highest grade, an "A", include consumer disclosure requirements. Washington, D.C.'s consumer protections focus on disclosures that must be made to consumers prior to the sale of a community solar subscription. In addition, the Advisors note that Maryland's Community Solar Energy Generation System Pilot Program contains a set of consumer protections. Maryland's program has been given a grade of A- on the IREC National Shared Renewables Scorecard, which is the second highest grade of any state graded by IREC. Since the goal of both SEIA and IREC is to increase the deployment of renewables, and both organizations support the provision of protections for consumers, the Advisors conclude that a properly developed set of consumer protections should not unreasonably impede the development of renewables in New Orleans. While the Advisors have reviewed several sets of consumer protections in preparation of this white paper, it is impractical to summarize all of them, particularly since many have similar provisions. Therefore, the Advisors have focused this discussion on the above four sets of consumer protections because they are either protections endorsed by the solar community itself or contained within state regulations that are well regarded by the solar community, and therefore, it is reasonable to conclude that the larger solar community does not view protections such as these as placing an undue burden on developers of solar community projects.

The SEIA Solar Business Code covers topics such as: (1) unfair, deceptive, or abusive practices; (2) advertising (including projections of future utility prices); (3) sales and marketing interactions; and (4) contracts. The SEIA Solar Business Code also requires SEIA members to abide by the law and all applicable ethical business guidelines set forth by the Council of Better Business Bureaus, the Federal Trade Commission, Consumer Financial Protection Bureau, relevant state consumer protection bureaus, and other regulatory bodies with jurisdiction. IREC's Clean Energy Consumer Bill of Rights covers the topics of (1) safety; (2) contracts; (3) warranties and protection; (4) advertising; (5) respect and privacy; and (6) access to the grid. The Maryland consumer protections cover the topics of (1) unauthorized subscriptions; (2) advertising solicitations: (3) creditworthiness; and (4) geographic marketing; (5) discrimination; (6) required disclosures; (7) contracts for customer subscriptions; (8) share transfers and portability; (9) disclosure of subscriber information; (10) escrow of pre-paid subscription fees; (11) notice of contract expiration or cancellation; (12) assignments of subscription contracts; (13) subscription disputes; (14) responsibility for actions of agents; (15) agent qualifications and standards; (16) agent training; (17) agent identification and misrepresentation; (18) door-to-door sales; and (19) notifications regarding door-to-door activity.

As one might expect, certain commonalities exist between the various sets of consumer protections.

1. Contracts and Disclosures

One very important aspect of consumer protection is making sure that consumers fully understand what they are committing to when they sign up for a solar community project. Consumer protection standards therefore frequently have requirements relating to contracts and disclosures designed to make sure that all relevant information is presented to the customer in a clear and easy to understand manner.

With respect to contracts, all four sets of consumer protection standards contain contracts and/or disclosure provisions designed to ensure that the transaction is clear and understandable to

consumers.⁸⁰ SEIA and IREC's provisions apply more broadly than to just community solar, Maryland's and D.C.'s are designed specifically for their community solar pilot program. SEIA's Solar Business Code contains rules to ensure that (1) contract terms reflect the verbal commitments made by the company to the customer and companies do not make any verbal promises or guarantees beyond what will be in the contract; (2) contracts should be clear and understandable to consumers; (3) contracts should contain all material terms; (4) companies should allow consumers a period of time to rescind contracts; and (5) the treatment of RECs is clear.⁸¹

IREC's Clean Energy Consumer Bill or Rights states that (1) contracts and contract terms shall be transparent, easy to understand and prominent; (2) all costs and financing terms, including those that may be dependent on price or retail rate escalation assumptions, shall be made clear, easy to understand and explained thoroughly; (3) all prices and costs shall be transparent throughout the life of the transaction; (4) contracts shall avoid underestimating costs and overestimating performance; (5) ownership terms shall be clearly defined; (6) contracts shall clearly describe the duration, nature, and potential impacts to the buyer of any restrictions, liens, fixture filings, or other security interests that may encumber the consumer's ability to transfer or modify his property or gain access to credit as a result of such terms; (7) termination and removal terms shall be clear, especially in cases of third-party ownership; (8) contracts shall include discussion of who is responsible for the proper disposal of the product at the end of its life; (9) performance calculations shall specify and include all relevant factors; (10) if installation and/or equipment will be monitored, the consumer shall be told what kind of data is being collected, who has ownership and access to the data, and if the data will be sold to others; (11) contracts shall include a reasonable period for rescinding contracts; (12) contracts shall include remediation terms regarding damage to property from work; (13) contracts shall include start and end dates, if applicable.⁸²

Washington, D.C.'s disclosure requirements contain provisions meant to ensure that consumers understand the transaction before they enter into a contract. Washington, D.C.'s rules require that an entity selling or reselling an interest in a community renewable energy facility shall provide a disclosure to the potential subscriber that includes the following, prior to the sale or resale of the subscription: (1) a good faith estimate of the annual kWh to be delivered by the community renewable energy facility based on the size of the subscriber's interest; (2) a plain language explanation of the terms under which the bill credits will be calculated; (3) a plain language explanation of the contract provisions regulating the disposition or transfer of the subscription; and (4) a plain language explanation of the costs and benefits to the potential subscriber's current usage and applicable tariff, for the term of the proposed contract.⁸³ Washington, D.C. also has a rule that the Mayor or his or her designee may require additional disclosures and may review all contracts for sale or resale of a subscription in a community renewable energy facility for use in a residential dwelling, upon request.⁸⁴

 $^{^{80}}$ The Advisors note that, in addition, the Minnesota legislature required the Minnesota commission to identify the information that must be provided to potential subscribers to ensure fair disclosure of future costs and benefits of subscriptions. Minn. Stat., § 216B.1641(e)(5).

⁸¹ SEIA's Solar Business Code, Chapter 5, https://www.seia.org/initiatives/seia-solar-business-code.

⁸² IREC's Clean Energy Consumer Bill of Rights, https://www.irecusa.org/consumer/bill-of-rights.pdf.

⁸³ See, D.C. Code, 34-1501, §. 121(a).

⁸⁴ See, D.C. Code, 34-1501, §. 121(b)-(c).

Maryland's rules sets forth both disclosure requirements and minimum contract requirements. Maryland requires certain disclosures to be made to the consumer prior to entering into a contract. Maryland requires that either prior to or at the same time as a contract for a subscription to a community solar electric generating system is executed, a subscriber organization shall present the customer with a completed Contract Summary Disclosure using a form that is approved by the Maryland Public Service Commission ("MPSC").⁸⁵ Maryland also requires that the subscriber organization provide notice of the subscription of a customer to a utility in a format consistent with MPSC orders and that it must include: (1) customer name, (2) customer service address; (3) billing name; (4) billing address; (5) utility name; (6) utility account number; (7) subscriber organization name; (8) subscriber organization account number; and (9) effective date of the enrollment.⁸⁶

Maryland's minimum contract requirements include that (1) a contract must contain all material terms and conditions; (2) a residential customer may downsize the allocation of solar kWh under an existing community solar energy generating system subscription; and (3) a subscriber may charge or collect no more than a reasonable fee for the downsizing of a subscriber's allocation.⁸⁷ The minimum terms Maryland requires be included in a contract (a) a plain language disclosure of the description; (b) provisions regulating the include: disposition or transfer of a subscription to the community solar energy generating system, as well as the costs or potential costs associated with such a disposition or transfer; (c) all nonrecurring (one-time) charges; (d) all recurring (monthly, yearly) charges; (e) a statement of contract duration, including the initial time period and any rollover provision; (f) terms and conditions for early termination, including any penalties and costs and the process; (g) the details about any security deposit required; (h) a description of any fee or charge and the circumstances under which a customer may incur a fee or charge; (i) a statement that the subscriber organization may terminate the contract early, including the circumstances under which it may do so, manner of and period needed for notice to the subscriber and any remedies; (j) a statement that the customer may terminate the contract early including the circumstances, notice, remedies and any cancellation fee; (k) a statement describing contract renewal procedures, if any; (l) a dispute procedure; (m) the commission's toll-free number and internet address; (n) notice that the contract does not include utility charges; (o) a billing procedure description; (p) the data privacy policies of the subscriber organization; (q) a description of any compensation to be paid for underperformance; (r) evidence of insurance; (s) a long-term maintenance plan; (t) current production projections and a description of the methodology used to develop production projections; (u) contact information for the subscriber organization for questions and complaints; (v) a statement that the subscriber organization and electric company do not make representations or warranties concerning the tax implications of any bill credits provided to the subscriber; (w) the method of providing notice to the subscribers when the community solar energy generating system is out of service for more than three business days; (x) an explanation of how unsubscribed production of the community solar energy generating system will be allocated; and (v) any other terms and conditions of service.⁸⁸

⁸⁵ Md. Code Regs. 20.62.05.07(A).

⁸⁶ Md. Code Regs. 20.62.05.07(B).

⁸⁷ Md. Code Regs. 20.62.05.08(A).

⁸⁸ Md. Code Regs. 20.62.05.08(A)(1). The Advisors note that New Hampshire's rules also require a contract with certain minimum requirements. N.H. Code Admin. R. Ann. PUC 909.05. Similarly Delaware's rules require both a

Maryland's rules regarding contracts also govern the methods of contracting, requiring customer consent and specific requirements for contracting over the internet.⁸⁹ They also contain provisions regarding evergreen contracts with automatic renewal provisions including notice required prior to automatic renewal and how the customer may terminate such a contract without penalty.⁹⁰

The Advisors recommend that the Council adopt similar disclosure and contract requirements. Consistent with the Advisors' recommendation that the Council allow flexibility for developers to create different business models, the Advisors believe that a structure setting forth minimum requirements for the provisions which must be included in a contract would be sufficient. In addition, in order to assist in ensuring that all minimum contract terms are set forth clearly in a manner that customers can understand and which will allow customers to easily compare different offers from community solar developers, the Advisors recommend that the Council adopt a standard cover sheet that must accompany each contract setting forth the essential disclosures in a standard format.

The Advisors also recommend that the Council require that each contract be accompanied by a standard cover page that lists the following information in order to allow consumers to more easily compare community solar projects:

- a. Start and end date of the contract.
- b. Renewal provisions, if any. If renewal provisions are automatic, explanation of when consumer may cancel renewal without penalty.
- c. Ability of consumer to terminate early, early termination penalty, if any.
- d. Ability of developer to terminate contract early, and any remedy provided to consumer.
- e. Ability of consumer to transfer subscription to another consumer. Ability of consumer to transfer bill credit to new address in ENO service territory.
- f. All one-time payments or charges, including any deposit.
- g. All recurring payments or charges.
- h. All penalties or fees to which the consumer may be subject.
- i. Total amount to be paid by consumer under contract.
- j. Billing and payment procedure.
- k. Whether consumer owns or leases the solar panel or capacity and statement that consumer owns RECs.

contract and a contract summary be provided to prospective customers and set forth the minimum requirements for each. 26 Del. Admin. Code § 3001-6.0.

⁸⁹ Md. Code Regs. 20.62.05.08(B).

⁹⁰ Md. Code Regs. 20.62.05.08(C).

- 1. Contact information of developer where consumer may call with questions. Must include physical address, telephone number and email address.
- m. Address, phone number and email contact information for the CURO.
- n. Statement that any bill credits are dependent upon the performance of the solar panels and the prevailing electric rates, which may change over time.
- o. Notice that contract does not include utility charges.
- p. Notice that developer makes no representations or warranties concerning the tax implications of the contract and consumers should consult their tax professional.

The Advisors also recommend that the Council require that all contract provisions be transparent, easy to understand and prominent, and that developers be prohibited from making any verbal promises regarding the community solar project that they do not put into writing in the contract, particularly promises regarding the performance of the project or the anticipated revenues from the project. The Advisors also recommend that the Council require that consumers be given a three-day period after the signing of the contract to rescind the contract. While the Advisors do not recommend that the Council require a standard form of contract, the Advisors do recommend that the Council establish minimum contract requirements that include the following:

- a. Start and end date of the contract with renewal provisions, if any. If renewal provisions are automatic, explanation of when consumer may cancel renewal without penalty.
- b. Ability of consumer to terminate early, early termination penalty, if any.
- c. Ability of developer to terminate contract early, and any remedy provided to consumer.
- d. Ability of consumer to transfer subscription to another consumer. Ability of consumer to transfer bill credit to new address in ENO service territory.
- e. Ability of the consumer to reduce the size of their commitment and any fees or penalties related thereto.
- f. All one-time payments or charges, including any deposit, and all recurring payments or charges (monthly, annually, etc.), as well as the total amount to be paid by the consumer under contract. Any penalties or fees to which the consumer may be subject and the conditions under which such penalties or fees would be applied.
- g. Billing and payment procedure.
- h. Whether the consumer owns or leases the solar panel or capacity and statement that consumer owns RECs.

- i. The data privacy policy of the developer, including what data will be collected, for what purpose and to whom the developer may disclose the data.
- j. Evidence of insurance.
- k. A long-term maintenance plan and the current production projections and a description of the methodology used to develop production projections.
- 1. Contact info of developer where consumer may call with questions. Must include physical address, telephone number and email address.
- m. Statement that any bill credits are dependent upon the performance of the solar panels and the prevailing electric rates, which may change over time.
- n. Notice that contract does not include utility charges.
- o. Notice that developer makes no representations or warranties concerning the tax implications of the contract and consumers should consult their tax professional.
- p. Any other terms and conditions of service.

2. Unfair, Deceptive, or Abusive Acts or Practices

The SEIA Solar Business Code prohibits any unfair, deceptive, or abusive acts or practices, ⁹¹ and it requires companies to regularly examine and consider the possibility of violations of that prohibition in all aspects of their business, including that touch on consumers or their interests, including, but not limited to, advertising, marketing, sales, origination, contract terms, contract options, installation, servicing, and loss mitigation.⁹² It requires that each company regularly remind and train each employee, from sales to senior management, to always consider consumer interests and to avoid unfair, deceptive, or abusive acts or practice violations.⁹³

The Maryland regulations prohibit subscriber organizations from engaging in any marketing or trade practice that is unfair, false, misleading, or deceptive.⁹⁴ It also prohibits any subscriber organization from discriminating against any customer, based wholly or partly, on race, color, creed, national origin, or gender of an applicant for service or for any arbitrary, capricious, or unfairly discriminatory reason.⁹⁵ It prohibits subscriber organizations from refusing to provide service to a customer except by the application of standards that are reasonably related to the subscriber organization's economic and business purposes.⁹⁶

The Advisors recommend that the Council's community solar rules similarly contain a prohibition on discriminatory, unfair, deceptive, or abusive acts or practices.

⁹¹ SEIA Solar Business Code, § 2.1, https://www.seia.org/initiatives/seia-solar-business-code.

⁹² Id. § 2.2, 2.4.

⁹³ Id. § 2.3.

⁹⁴ Md. Code Regs. 20.62.05.03(A)(2).

⁹⁵ Id. 20.62.05.06(A).

⁹⁶ Id. 20.62.05.06(B).

3. Advertising Practices

SEIA's Solar Business Code requires that advertising claims be accurate, easily understandable and based on facts.⁹⁷ It prohibits deceptive and misleading advertising claims by any medium, and requires that all claims must be supported by factual, verifiable sources.⁹⁸ It requires companies to be familiar with all advertising laws, rules, regulations, and guidance, including Federal Trade Commission guidance on advertising and marketing.⁹⁹ It cautions against the use of the term "free" and states that prices quoted must be accurate and complete.¹⁰⁰ If advertised prices include incentives, SEIA's code requires that the company fully disclose the incentives and appropriate details regarding the eligibility requirements and qualifications or otherwise provide resources that are reasonably necessary for the Consumer to make an informed decision.¹⁰¹ SEIA requires that estimated prices must be reasonably based on the information the Company possesses, and must be clearly disclosed as estimates.¹⁰² SEIA's code provides that any comparisons of current pricing, contract terms, products or services must not be misleading and must include all relevant facts to fully understand the pricing terms products or services being compared.¹⁰³ It also requires that if advertised prices include initial pricing reductions, such as teaser rates, or future increases, all material terms of such initial reductions or future increases shall be disclosed.¹⁰⁴ SEIA also lists the material terms that companies must take into account when making system production calculations and requires that projections of future utility prices must be based on accepted sources and methods, which are specifically listed in the SEIA's Solar Business Code.¹⁰⁵

SEIA also requires that any endorsements used in any media format either owned by the Company or initiated or sponsored by the Company be (1) authorized by the endorser; (2) accurate, genuine and in proper context; (3) without misrepresentation by affirmative statement or omission; (4) clear as to whether the endorser is providing an opinion as a consumer with true firsthand experience, solar expert, or spokesperson; and (5) transparent as to whether any connections exist between the endorser and the Company beyond that which a consumer would ordinarily expect.¹⁰⁶

The Advisors believe that, given the complexity of and technical knowledge required to project future utility prices, the majority of potential subscribers are unlikely to be able to independently verify a developers' future utility price projections with any degree of confidence. Therefore, the Advisors believe it is reasonable to require developers to use price projections that are based on accepted sources and methods, such as those listed in the SEIA Solar Business Code.

⁹⁷ SEIA Solar Business Code, § 3, https://www.seia.org/initiatives/seia-solar-business-code.

⁹⁸ Id. §§ 3.1 and 3.2.

⁹⁹ Id. § 3.3.

¹⁰⁰ *Id.* §§ 3.4 and 3.5.

¹⁰¹ *Id.* § 3.6.

 $^{^{102}}$ Id. § 3.7.

¹⁰³ *Id.* § 3.8. ¹⁰⁴ *Id.* § 3.9.

 $^{^{105}}$ Id. § 3.10-3.13.

 $^{^{106}}$ Id. § 3.14.

IREC's Consumer Bill of Rights requires that claims be accurate, factual and substantiated, and that they avoid underestimating costs, overestimating performance and overvaluing financial and incentive benefits.

4. Marketing Practices

IREC's Consumer Bill of Rights provides that companies must follow applicable telephone marketing laws, such as the National Do Not Call Registry rules, and must also follow applicable email and commercial electronic message laws. The SEIA's Solar Business Code states that companies must respect consumer privacy, including by complying with all applicable marketing laws restricting when customers may be contacted (like the Do Not Call Registry), and must respect the wishes of customers by maintaining their own "do-not-contact" lists.¹⁰⁷ It also requires, among other things, that representatives must clearly and truthfully identify the company that they represent, they must not harass, threaten, or badger customers, avoid highpressure sales techniques, seek openness and transparency and not take advantage of a customer's lack of knowledge, that they answer consumer questions honestly, that they not market products they know will not work as expected, and may not make statements that are false or without reasonable basis in fact and may not omit material information. The Maryland rules similarly contain a requirement that a subscriber organization must comply with all applicable state and federal marketing laws.¹⁰⁸ Maryland also has a rule permitting geographic marketing, but prohibiting discrimination based on the economic character of a geographic area or the collective credit reputation of the area.¹⁰⁹ Finally Maryland's rules impose restrictions on door-to-door marketing including requiring an identification badge, prohibition on misrepresentation of who the marketer represents, compliance with state door-to-door marketing law, and notice to the state commission when door-to-door marketing begins.¹¹⁰

The Advisors recommend a set of regulations regarding marketing practices designed to ensure that a Subscriber Organization is not permitted to imply that it has a relationship with any other entity, including ENO, that it does not have, that it may not use any fraudulent, deceptive, or other unlawful marketing practices, that it must abide by all applicable marketing laws, that it must conduct criminal background checks on any person conducting door-to-door marketing on its behalf, that anyone conducting door-to-door marketing must wear an identification badge, and that it must train all its employees and agents on local, state, and federal marketing laws and regulations, the community solar consumer protections and on its own products services and contracts. The Advisors recommend that the Council permit geographic marketing, so that a community solar project can be aimed at a specific building or neighborhood, but would prohibit a Subscriber Organization from refusing to provide service to a customer based on the economic character of a geographic area or the collective credit reputation of the area.

VII. Conclusion

The Advisors have reviewed best practices with respect to community solar and have made recommendations in this white paper and the attached Proposed Community Solar Rules as

¹⁰⁷ *Id.* §§ 4.1-4.5.

¹⁰⁸ Md. Code Regs. 20.62.05.03.

¹⁰⁹ Id. 20.62.05.05.

¹¹⁰ *Id.* 20.62.05.19 and 20.

to what the Advisors believe would be the best structure for community solar in New Orleans based upon that research. However, these proposals have not yet been vetted with or informed by input from the utility or the public, both of whom should have input into the structure of this program. Therefore, the Advisors recommend that the Council use this white paper and the attached Proposed Community Solar Rules as the basis for opening a rulemaking docket to begin the conversation around Community Solar with ENO and the public.

APPENDIX A

Bibliography

NREL, A Guide to Community Solar: Utility, Private, and Non-profit Project Development -- <u>https://www.nrel.gov/docs/fy11osti/49930.pdf</u>

DOE community solar page: <u>https://www.energy.gov/eere/solar/community-and-shared-solar</u>

US DOE/NREL: A Guide to Community Solar: Utility, Private, and Nonprofit Project Development <u>https://www.nrel.gov/docs/fy12osti/54570.pdf</u>

Interstate Renewable Energy Council: Model Rules for Shared Renewable Energy Programs: <u>http://www.irecusa.org/wp-content/uploads/2013/06/IREC-Model-Rules-for-Shared-Renewable-Energy-Programs-2013.pdf</u>

NARUC Summer Committee Meetings, Committee on Consumer Affairs "Community Solar Customer Preferences" <u>https://pubs.naruc.org/pub.cfm?id=37601BAA-A28D-49CD-F66C-FF21469C53E7</u>

NARUC Winter Policy Summit, Rate Design Subcommittee, "Community Solar, How the Program Design Can Impact Customer Participation" <u>https://pubs.naruc.org/pub.cfm?id=05FC14FB-A78D-837D-3A35-26C98E09612D</u>

NRRI, Tom Stanton, Kathryn Kline: The Ecology of Community Solar Gardening: A 'Companion Planting' Guide <u>http://nrri.org/download/nrri-16-7-community-solar/</u>

Utility Dive: What makes a successful utility-led community solar program? <u>https://www.utilitydive.com/news/what-makes-a-successful-utility-led-community-solar-program/442663/</u>

Energy Sage: Top Community Solar States: Minnesota vs California, Massachusetts Colorado Community Solar <u>https://news.energysage.com/comparing-top-community-solar-states-minnesota-california-massachusetts-colorado/</u>

Institute for Local Self-Reliance: Why Minnesota's Community Solar Program is the Best <u>https://ilsr.org/minnesotas-community-solar-program/</u>

NREL: Status and Trends in the U.S. Voluntary Green Power Market (2015 Data) https://www.nrel.gov/docs/fy17osti/67147.pdf

NREL: Feldman, Brockway, Ulrich, Margolis, Shared Solar: Current Landscape, Market Potential, and the Impact of Federal Securities Regulation, https://www.nrel.gov/docs/fy15osti/63892.pdf

Smart Electric Power Alliance: What the Community Solar Customer Wants https://sepapower.org/resource/what-the-community-solar-customer-wants/

Colorado Department of Regulatory Agencies, Public Utilities Commission, 4 Code of Colorado Regulations CCR 723-3, Part 3, 3665 Community Solar Gardens

Code of Maryland Regulations > Title 20. Public Service Commission > Subtitle 62> Community Solar Energy Generation Systems, COMAR 20.62.01

IREC state scorecards:

https://sharedrenewablesscorecard.org/wp-content/uploads/2017/09/Scorecard-CA-VNM-State-Program-Grade-Reports.pdf

https://sharedrenewablesscorecard.org/wp-content/uploads/2017/09/Scorecard-CA-ECR-State-Program-Grade-Reports.pdf

https://sharedrenewablesscorecard.org/wp-content/uploads/2017/09/Scorecard-CO-State-Program-Grade-Reports.pdf

https://sharedrenewablesscorecard.org/wp-content/uploads/2017/09/Scorecard-CO-State-Program-Grade-Reports.pdf

https://sharedrenewablesscorecard.org/wp-content/uploads/2017/09/Scorecard-DE-State-Program-Grade-Reports.pdf

https://sharedrenewablesscorecard.org/wp-content/uploads/2017/09/Scorecard-DE-State-Program-Grade-Reports.pdf

https://sharedrenewablesscorecard.org/wp-content/uploads/2017/09/Scorecard-MD-State-Program-Grade-Reports.pdf

https://sharedrenewablesscorecard.org/wp-content/uploads/2017/09/Scorecard-MA-NNM-State-Program-Grade-Reports.pdf

https://sharedrenewablesscorecard.org/wp-content/uploads/2017/09/Scorecard-MA-VNM-State-Program-Grade-Reports.pdf

https://sharedrenewablesscorecard.org/wp-content/uploads/2017/09/Scorecard-MN-State-Program-Grade-Reports.pdf

https://sharedrenewablesscorecard.org/wp-content/uploads/2017/09/Scorecard-NH-State-Program-Grade-Reports.pdf

https://sharedrenewablesscorecard.org/wp-content/uploads/2017/09/Scorecard-NY-State-Program-Grade-Reports.pdf

https://sharedrenewablesscorecard.org/wp-content/uploads/2017/09/Scorecard-VT-State-Program-Grade-Reports.pdf

https://sharedrenewablesscorecard.org/wp-content/uploads/2017/09/Scorecard-DC-State-Program-Grade-Reports.pdf City of New Orleans, Climate Action Plan for a Resilient New Orleans, July 7, 2017 https://www.nola.gov/nola/media/Climate-Action/Climate-Action-for-a-Resilient-New-Orleans.pdf

Community Solar in Illinois: https://citizensutilityboard.org/community-solar-illinois/

Illinois Commerce Commission Order re: Commonwealth Edison Community Solar Program, September 2017

Xcel Energy's Community Solar Garden Program; Minnesota House of Representatives; Updated: October 2017

Community Solar Gardens Sprouting in Minnesota: ILSR, 22 April 2014

The State(s) of Distributed Solar - 2017 Update - ILSR, 24 May 2018

Texas Community Solar Guidelines - Produced by the North Central Texas Council of Governments in partnership with the State Energy Conservation Office (SECO) August 2016

Community Solar New Renewable Energy Option for Residential Customers – Austin Energy, City of Austin, Texas.

Oregon regulators set community solar rules, aiming for 160 MW in initial round. Portland Business Journal June 30, 2017

Oregon Community Solar Program Rules: Oregon Public Utilities Commission, Chapter 860, Division 88,

Community Shared Solar Implementation Guidelines for Massachusetts Communities; Commonwealth of Massachusetts, DOE Sunshot

Draft Community Solar Rules, Washington State Legislature, chapter 80.28 RCW; WAC 480. <u>https://www.utc.wa.gov/_layouts/15/CasesPublicWebsite/GetDocument.ashx</u>

Tacoma Power Community Solar Participation Agreement, Tacoma, Washington. <u>https://www.mytpu.org/tacomapower/about-tacoma-power/dams-power-</u> <u>sources/community-solar/community-solar-participation.htm</u>

The Northwest Community Solar Guide; developed jointly by the Bonneville Environmental Foundation and Northwest Sustainable Energy for Economic Development. http://sparknorthwest.org/wp-content/uploads/2013/05/NW-Community-Solar-Guide.pdf

Virginia community solar pilot programs; Virginia State Legislature SB 1393, 2017 Session, Chapter 580, section 56-585.1:3. Practical Analytics for Local Community Solar Planning; CommunitySolarValueProject.com Fall 2017, Extensible Energy, LLC, DOE Sunshot and participating utilities.

California SB 43

Colorado CRS 40-2-127; 4 CCR 723-3665

Connecticut PA 16-116

Delaware Administrative Code, Title 26, Public Utilities

Code of Maryland Regulations, Title 20, Public Service Commission; Subtitle 62. Community solar Energy Generation Systems

Maine 65-407 Ch. 313

Massachusetts 220 CMR 18.00

Minnesota Statutes, Chapter 216, Public Utility Commission

New Hampshire Code of Administrative Rules, PUC 900, Public Utilities Commission

Oregon 78th Legislative Assembly Senate Bill 1547

Rhode Island 2016 S 2450 Substitute B

Vermont H. 475

Washington, D.C. Code, Title 34, Public Utilities

APPENDIX B

PROPOSED COMMUNITY SOLAR RULES For the Council of the City of New Orleans

II. OVERVIEW

The purpose of the Community Solar Rules ("Rules") is to establish the City Council of New Orleans' rules, policies, and procedures for community solar generating facilities and the associated electric utility customer subscriptions in Orleans Parish, including: eligibility for participating in community solar generating facilities; developer, facility, and customer limits with respect to community solar; establishment of a bill crediting mechanism for participants; customer protection provisions; general interconnection requirements; safety and performance requirements; and contractual and reporting requirements. These Rules shall be cited as the "New Orleans Community Solar Rules." The Council may waive a provision of these Rules upon a showing of good cause.

III. DEFINITIONS

As used in these rules; the following words and phrases shall have the following meaning, unless the context clearly indicates otherwise:

"Agent" means a person who conducts business, including marketing or sales activities, or both, on behalf of a CSG Facility Subscriber Organization and includes an employee, a representative, an independent contractor, and subcontractors, vendors and representatives not directly under contract with the Subscriber Organization that conducts business, including marketing or sales activities, on behalf of the Subscriber Organization.

"Baseline Annual Usage" refers to a Subscriber's accumulated electricity use in kilowatt-hours ("kWh") for the previous 12-month period, as measured at the Utility's meter, net of any distributed generation provided by the Subscriber to the utility system at that meter. For a Subscriber that does not have a record of 12 months of electricity use at the time of the Subscriber's most recent Subscription, an estimate of the Subscriber's accumulated 12 months of electricity use in kWh, determined in a manner the Council approves.

"Consent" means an agreement with an action communicated by the following: a written document with Customer signature; or an electronic document with electronic signature.

"Contract Summary" means a summary of the material terms and conditions of a Community Solar Generating Facility Subscriber contract on a form provided by the Council.

"Council" refers to the Council of the City of New Orleans.

"Community Solar Generating Facility" or "CSG Facility" means a solar energy facility that:

- (i) converts solar energy to electricity;
- (ii) is owned by the Utility or any other for-profit or nonprofit entity or organization;
- (iii) has a generating capacity/nameplate rating that does not exceed two megawatts ("MW") as measured by the alternating current rating of the system's inverter;
- (iv) can provide power to or is connected to the Utility's distribution system;
- (v) is located in the Utility's electric service territory;
- (vi) is individually metered;
- (vii) has at least three Subscribers;
- (viii) sells the Output from the facility to the Utility and which the purchase of the Output from the facility shall take the form of a credit against the Subscriber's electric bill; and
- (ix) the beneficial use and renewable attributes of the Output of the facility belongs to the Subscribers.

"Community Solar Program" means a program that encompasses the facilities, entities, functions and requirements implemented by these Rules.

"Customer" means a retail electric customer account holder of the Utility.

"CURO" means Council Utilities Regulatory Office.

"Low-Income Customer" means a Customer whose gross annual household income is at or below 175 percent of the federal poverty level for the year of subscription or who is certified as eligible for any federal, state, or local assistance program that limits participation to households whose income is at or below 175 percent of the federal poverty limit.

"Low-Income Subscriber" means a Subscriber who is a Low-Income Customer.

"NEM Rules" means the New Orleans Net Energy Metering Rules adopted by Council Resolution No. R-07-132.

"Output" means the energy and power produced by a CSG Facility.

"**Person**" refers to any individual, firm, partnership, corporation, company, association, cooperative association, joint stock association, joint venture, governmental entity, or other legal entity.

"Personally Identifiable Information" means information that can be used to distinguish or trace an individual's identity, either alone or when combined with other personal or identifying information that is linked or capable of being linked to a specific individual.

"Renewable Energy Credit" or **"REC"** means a contractual right to the full set of nonenergy attributes, including any and all credits, benefits, emissions reductions, offsets, and allowances, howsoever entitled, directly attributable to a specific amount of electric energy generated from a renewable energy resource. One REC results from one MWh of electric energy generated from a renewable energy resource.

"Rules" means the Community Solar Rules established herein or as modified by subsequent action.

"Security Deposit" means any payment of money given to a Subscriber Organization by a Subscriber in order to protect the Subscriber Organization against nonpayment of future subscription fees, but does not include escrowed prepaid subscription fees.

"Service Connection" is the location on the CSG Facility's premises/facilities at which a point of delivery of power between the Utility and the CSG Facility is established.

"Subscriber" means a Customer of the Utility that holds a Subscription to one or more CSG Facilities and has identified one or more individual meters or accounts related to electric service to which the Subscription(s) shall be attributed.

"Subscriber Organization" means a person or legal entity that owns and operates a CSG Facility, or operates a CSG Facility that is built and owned by a third party under contract with such Subscriber Organization. A Subscriber Organization may also be a Subscriber to the facility, subject to the Limitations on Subscriptions set forth herein.

"Subscription" refers to that portion or proportionate interest of Output of a CSG Facility that is allocated to a Subscriber, including the RECs associated with or attributable to the CSG Facility.

"Unsubscribed Energy" refers to any energy Output of a CSG Facility in kWh that is not allocated to a Subscriber.

"Utility" refers to the utility providing electric service to customers in the City of New Orleans and regulated by the Council.

IV. CUSTOMER ELIGIBILITY

A. Customer Eligibility

- (1) All customer rate classes are eligible to subscribe to a CSG Facility.
- (2) A Customer may subscribe to a CSG Facility in the Utility's service territory, providing that the Customer has an account for electric service with the Utility.
- (3) A Customer may subscribe to CSG Facility regardless of the Customer's participation in other Utility-sponsored renewable programs, such as NEM, providing that the Customer's participation does not violate, individually or collectively, the eligibility limits of all applicable programs and these Rules.

B. Limitations on Subscriptions

- (1) A Customer may not hold Subscriptions representing a total amount of energy in the Community Solar Program that exceeds 100 percent of the value of the Subscriber's Baseline Annual Usage.
- (2) A Customer may purchase multiple Subscriptions from one or more CSG Facilities provided that the total of the Subscriptions does not exceed the requirements in III.B.(1) of the Rules.
- (3) No Customer may own more than a 40 percent interest in the beneficial use of the electricity generated by a CSG Facility, including without limitation, the renewable energy and RECs associated with or attributable to the CSG Facility.

V. COMMUNITY SOLAR GENERATING FACILITY ELIGIBILITY

A. CSG Facility Eligibility

- (1) A CSG Facility can be owned by the Utility or any other for-profit or nonprofit entity or organization.
- (2) A Subscriber Organization that has registered with the Council that wishes to construct and operate a CSG Facility as part of the Community Solar Program shall submit an application to the Utility in accordance with the CSG Facility project application procedure established by the Utility as part of these Rules.
- (3) A Subscriber Organization shall be responsible for the operation and maintenance of the CSG Facility, the associated Subscription management, and any required reporting to the Utility.
- (4) A CSG Facility must be located in the Utility's service territory, must be individually metered, and must be connected to the Utility's distribution system.

- (5) A CSG Facility may be either new construction or a solar generating system that commenced operation prior to Council adoption of these Rules.
- (6) The Subscriber Organization for the CSG Facility must enter into a Contract with the Utility to sell the Output from the facility to the Utility. The purchase of the Output from the CSG Facility shall take the form of a credit against the Subscriber's electric bill.
- (7) The Council may establish additional conditions limiting the number of CSG Facilities for which any single Subscriber Organization or its affiliates may apply.

B. CSG Facility Limitations

- (1) The CSG Facility's generating capacity/nameplate rating must not exceed two MW as measured by the alternating current rating of the system's inverter.
- (2) The beneficial use and renewable attributes of the Output of the CSG Facility must remain with the Subscribers.
- (3) A CSG Facility must have at least three Subscribers.
- (4) The total number of accounts per CSG Facility may be determined by the Subscriber Organization; however, each Subscription shall be sized to represent at least one kW of the CSG Facility's nameplate rating. The minimum one kW sizing requirement herein shall not apply to Subscriptions owned by an eligible Low-Income Subscriber.
- (5) A CSG Facility with a nameplate rating of 1000 kW or greater may not be located on the same or adjacent property as an existing or proposed CSG Facility owned by the same Subscriber Organization or affiliate with a nameplate rating of 1000 kW or greater.
- (6) One or more Subscriber Organizations may construct multiple CSG Facilities on a single parcel of property, providing that the total MW of the multiple projects on the single parcel does not exceed 2 MW.

VI. CAPACITY LIMITS

A. Community Solar Program Capacity Limits

- (1) Subject to the CSG Facility category limits established in these Rules, the Utility shall accept CSG Facility applications as long as the total capacity of all CSG Facilities, as measured by the sum of the nameplate capacity of each CSG Facility's inverter, is less than or equal to five percent of the Utility's annual peak in MW for the first three years of the Community Solar Program. Subsequent to the first three years the Council will reconsider the total capacity limit.
- (2) Prior to accepting CSG Facility applications beyond the Community Solar Program Capacity Limits or the CSG Facility Category Limits, the Utility shall seek and obtain Council approval.

B. CSG Facility Category Limits

- (1) CSG Facilities shall be classified into one of two categories:
 - (a) Open Category: CSG Facilities of any size up to two MW as measured by the alternating current rating of the system's inverter.
 - (b) Low-Income Category: CSG Facilities of any size up to two MW as measured by the alternating current rating of the system's inverter in which a minimum of 10 percent of the CSG Facility's Output is provided to Low-Income Subscribers.
- (2) The Utility shall accept CSG Facility applications in each of the following categories up to the Community Solar Program Capacity Limits and according to the following CSG Facility Category percentages:
 - (a) Open Category: up to 70 percent of the Community Solar Program Capacity Limits; and
 - (b) The remaining 30 percent of the Community Solar Program Capacity Limit shall be reserved for Low-Income Category CSG Facilities.

VII. SUBSCRIBER ORGANIZATION REGISTRATION AND RECORDS

A. Registration with the Council

- (1) A Subscriber Organization shall register with the Council, on forms authorized by the Council, prior to offering Subscriptions to a CSG Facility or operating a CSG Facility.
- (2) The Council shall assign each Subscriber Organization with an identification number.
- (3) A Subscriber Organization shall maintain the registration with the Council by notifying the Council whenever certain information supplied as part of the registration with the Council becomes inaccurate.

B. Subscriber Organization Obligations and Records

- (1) A Subscriber Organization shall maintain on file with CURO the following information for the duration of the operation of each CSG Facility:
 - (a) Owner name and address.
 - (b) Business address.
 - (c) Name of registered agent in Orleans Parish.
 - (d) General information on the facility including: location, DC and AC nameplate capacity, major equipment list, interconnection requirements, and any other relevant design details.
 - (e) Proof of liability insurance in an amount reasonably adequate to protect the public and the Utility against damages caused by the operation of each CSG Facility.

- (f) Proof of registration "In Good Standing" with the Louisiana Secretary of State.
- (2) A Subscriber Organization shall maintain in its own files the following information for the duration of the operation of each CSG Facility:
 - (a) Subscriber information including: name, mailing address, address at which the Subscriber has an account for electric service with the Utility, and, where relevant, the data supporting a Subscriber's classification as a Low-Income Subscriber.
 - (b) Subscription information for each Subscriber including a copy of the contract, rates, fees, and terms and conditions.
- (3) A Subscriber Organization shall provide the information in Section VI.B(2) to the Council upon request.
- (4) A Subscriber Organization shall provide to the Council, in a timely manner, information requested by the Council concerning the operation of its CSG Facilities.
- (5) Contracts between the Subscriber Organization and the Utility shall be a matter of public record and shall be filed with the Clerk of Council by the Subscriber Organization.
- (6) A Subscriber Organization, and, where relevant, the third-party owner/developer, are responsible for ensuring that its CSG Facility is constructed, maintained, and operated in compliance with all relevant local, state, and federal laws, rules and regulations, including, but not limited to, zoning, permitting, occupational safety and health, and environmental laws, rules, and regulations.

VIII. COMMUNITY SOLAR PROGRAM MANAGEMENT

A. Community Solar Program Plan

(1) Within 60 days from the effective date of the Rules, the Utility shall develop a Community Solar Plan setting forth the Utility's plan for implementing these Rules including the Utility's program administration plan and relevant tariffs for compliance with these Rules.

B. CSG Facility Standard Interconnection Agreement

- (1) Within 60 days from the effective date of the Rules, the Utility shall develop a Standard Interconnection Agreement for CSG Facilities, which shall be subject to the review and approval of the Council.
- (2) The proposed Standard Interconnection Agreement for CSG Facilities shall be consistent with the provisions of Entergy's Distribution Design Basis/Standards DR7-01 and DR7-02.
- (3) The proposed Standard Interconnection Agreement for CSG Facilities shall be consistent with the provisions of these Rules and shall describe any and all interconnection expenses, and other charges in conformity with the Rules.

C. CSG Facility Project Application Procedure

- (1) Within 90 days from the effective date of the Rules, the Utility shall establish a CSG Facility application procedure in compliance with these Rules and applicable Council orders, and consistent with the CSG Facility Standard Interconnection Agreement.
- (2) The Utility shall develop its CSG Facility application procedure in a manner designed to encourage achievement of the Council's community solar guiding principles, timely project development, and equitable allocation of the Community Solar Program Capacity Limits and the CSG Facility Category Limits. In addition CSG Facility details necessary for the application, the application procedure shall require:
 - (a) Proof of Subscriber Organization registration with the Council;
 - (b) Proof of application for all applicable permits to construct and Operate the CSG Facility; and
 - (c) Proof of site control. The utility shall accept as proof of site control: evidence of property ownership; an executed lease agreement; or a signed option to purchase a lease.

D. Processing of CSG Facility Applications

- (1) The Utility shall process applications from Subscriber Organizations filed in accordance with the CSG Facility application procedure in the order in which the utility receives the application.
- (2) Within five business days of receipt, the Utility shall notify the Subscriber Organization whether the application is rejected due to the capacity limits established by these Rules.
- (3) Within five business days of receipt, the Utility shall notify the Subscriber Organization whether the application is complete. If the application is incomplete, the Utility shall provide a written list detailing all information that must be provided to complete the application.
- (4) A Subscriber Organization receiving notice of an incomplete application shall revise and submit the required information within 10 business days after receipt of the list of incomplete information. Failure to submit the required information within 10 business days shall result in the Subscriber Organization losing their place in the queue, but shall not otherwise prejudice the Subscriber Organization's ability to file a new, complete application in the future.
- (5) The Utility shall notify a Subscriber Organization within five business days of receipt of a revised application whether the application is complete or incomplete.
- (6) The Utility shall grant an extension of time of an additional 10 days to provide such information upon request from the Subscriber Organization.
- (7) The Utility shall reject an application that is not submitted in accordance with CSG Facility application procedure.

- (8) The Utility shall assign each CSG Facility a unique identification number.
- (9) If the Utility participates as a Subscriber Organization, it shall apply to the Council for permission to enter each of its proposed CSG Facilities into the community solar program.
- (10) If the Utility or any of its affiliates participate as a Subscriber Organization, the Utility may not recover any portion of its CSG Facility costs through its base rates. If a Utility or any of its affiliates participate as a Subscriber Organization, it must not offer its own CSG Facility, or that of its affiliate any preferential treatment or benefit not available to other Subscriber Organizations.
- (11) If a CSG Facility fails to begin operating within 12 months of an approved application by the Subscriber Organization, the Subscriber Organization should provide to the Utility an additional deposit of \$50 per kW to continue under the Community Solar Program.
- (12) The utility shall return the CSG Facility deposit upon commencement of operation, unless the CSG Facility fails to begin operating with 18 months of an approved application.
- (13) Any forfeited deposits shall be forwarded to the Council.

E. Utility Data and Project Information

- (1) The Utility shall designate a contact person, and provide contact information on its website for submission of all project application requests, and from whom information on the project application request process and the Utility's electric distribution system can be obtained.
- (2) The Utility shall provide updated information on its website about the current status of the Community Solar Program and CSG Facility applications, including: name; address; date of application; interconnection status; expected date of operation; and remaining available capacity by year in each program category.
- (3) The Utility shall make reasonable attempts to assist all applicants with identifying means to locate and operate CSG Facilities in a manner that minimizes adverse effects or maximizes distribution system benefits at locations identified by applicants. If the Utility or any of its affiliates choose to participate as an owner/developer of a CSG Facility and/or a Subscriber Organization, the Utility must offer other owner/developer and Subscriber Organizations equal access to the information available to the Utility and its affiliates for locating and operating CSG Facilities in a manner that minimizes adverse effects or maximizes distribution system benefits so that neither the Utility's nor its affiliate's CSG Facility has preferential access to information inaccessible to other Subscriber Organizations.
- (4) The information provided by the Utility on its website shall include studies and other materials useful to understanding the feasibility of interconnecting a CSG Facility on the Utility's electric distribution

system, except to the extent providing the materials would violate security requirements, confidentiality agreements, or be contrary to law.

- (5) The Utility may require an applicant to execute an appropriate confidentiality agreement prior to release or access to confidential or restricted information.
- (6) The Utility shall monitor and review its distribution system to determine any adverse or beneficial effects resulting from each installed CSG Facility.
- (7) The Utility shall maintain for the duration of the community solar program, the following customer information for each CSG Facility and Subscriber Organization: customer rate class; annual usage; average monthly bill; and peak demand.
- (8) The Council shall be provided with annual reports on CSG Facility billing accuracy, interconnection complaints, and consumer complaints related to the program.

F. Utility Reporting

- (1) The Utility shall provide the Council with complete date, information, and supporting documentation necessary to monitor the Community Solar Program status, impact on operations, Subscriber and ratepayer impact, and other information upon request.
- (2) By May 1 of each year, the Utility shall file an annual report with the Council on the Status of the Community Solar Program Including: (1) monthly energy (MWh) and capacity (MW) produced by the Community Solar Program, including each CSG Facility; (2) total cost of energy and capacity ENO purchases through the Community Solar Program, identifying bill credits separate from unsubscribed energy; (2) \$/MW and \$/MWh of the capacity and energy purchased, (3) Utility costs associated with administering the Community Solar Program; (4) tons of emissions avoided through utilization of the energy and capacity produced by the Community Solar Program; (5) any positive and negative impacts on the operation of the Utility's distribution system; (6) any benefits provided to the Utility's system by the Community Solar Program related to mitigating or recovering from storm events or other outages.
- (3) The electric Utility shall maintain a list of projects and total program capacity, and shall provide the list to the Council by June 30 and December 31 of each year.
- (4) The Utility shall publish on its website a rolling 24-month report of what the per-kWh and per-kW credit for energy and capacity was in order to assist customers seeking to evaluate whether to enter into or renew a contract with a CSG Facility.

G. Utility Cost Recovery and Charges

- (1) Once the Utility's Community Solar Plan has been reviewed and approved by the Council, the Utility shall have a fair opportunity to receive full and timely cost recovery of costs incurred to administer the Community Solar Program, interconnection and metering costs for CSG Facilities, and any non-reimbursed portion of program bill credit costs and unsubscribed energy costs.
- (2) The Utility may not establish a separate surcharge fee or rate for recovery of any Community Solar programs costs identified in Section VII.G.1. The specific mechanisms for Community Solar program cost recovery will be approved by a Council resolution based on the Council's review of the community solar tariffs proposed in the Community Solar Plan required under Section VII.A.1.
- (3) The Utility may assess a Council-approved charge to the Subscriber Organization to cover the Utility's costs of delivering the renewable energy generated by each CSG Facility to the CSG Subscriber's premises, integrating the generation from the CSG Facility into the Utility's system, administering the contracts with Subscriber Organizations, and administering Subscriber billing credits. This charge shall not reflect costs that are already recovered by the Utility from Customers through other charges. The Utility may seek a revision of this charge no more frequently than once per year.

IX. SUBSCRIPTION CREDITS

- A. Subscriber Organizations are required to provide real time reporting of production as specified by the Utility. For CSG Facilities greater than 250 kW, the Subscriber Organization shall provide real time electronic access to production data. The Utility may require different real time reporting for CSG Facilities 250 kW and smaller.
- B. The Subscriber Organization for each CSG Facility will provide a monthly report to the Utility listing all Subscribers and the proportion of the CSG Facility Output that shall be applied to each Subscriber.
- C. The Utility shall apply credits to each Subscriber's monthly bill using the most recently updated monthly Subscriber list.
- D. The Utility shall determine the amount of CSG Facility monthly kWh Output to be credited to each Subscriber by multiplying the Subscriber's most recent generation proportion of the CSG Facility by the Utility metered Output of the CSG Facility.
- E. The value of each CSG Facility monthly kWh credit will be based on avoided capacity and energy costs. The value will be determined by the following:
 - (1) The avoided capacity, energy, and other directly quantifiable costs based on the Utility's incremental cost of providing service;
 - (2) The avoided energy costs will be the previous calendar year average hourly locational marginal prices applicable to the Utility;
 - (3) The corresponding avoided capacity cost, will be based on short-run marginal cost concepts, and will be the current annual fixed cost revenue

requirement of a peaking unit expressed in \$/kWh based on the typical annual energy Output of a solar photovoltaic ("PV") installed in Orleans Parish.

- F. The appropriate credit to be applied to each Subscriber's bill will be a dollar amount credit determined by multiplying the Subscriber's kWhs from Section VIII.D. by the value of each CSG kWh from Section VIII.E.
- G. The Subscription monthly bill credit so determined will apply to each Subscriber irrespective of the customer class tariff under which the Subscriber receives service from the Utility, and will apply to all Subscribers in a CSG Facility.
- H. If, in a monthly billing period, the Subscriber's billing credit associated with the Subscriber's Subscriptions exceeds the Subscriber's bill from the Utility, the excess billing credit will be rolled over as a dollar bill credit from month to month indefinitely until the Subscriber terminates service with the Utility at which time no payment shall be from the Utility for any remaining bill credits associated with the Subscriber's Subscription.
- I. The Utility shall retain a record of CSG Facility kWh applied to each Subscriber's account for a period of three years.

X. UNSUBSCRIBED ENERGY

- A. The Utility will pay a Subscriber Organization for the energy produced by a CGS Facility and delivered to the Utility which is not allocated to a Subscriber of the CSG Facility.
- B. The rate per kWh to be paid for net deliveries to the Utility, pursuant to Section IX.A, shall be the Utility's estimated avoided energy costs for the appropriate time period from the Utility's most recent biennial filing with the Clerk of Council of the City of New Orleans pursuant to the Public Utilities Regulatory Policies Act of 1978, Section 210.

XI. LOW-INCOME CUSTOMER VERIFICATION

- A. The operator of a low-income multi-family dwelling unit may apply to the Council to qualify as a Low-Income Subscriber for the purposes of the Community Solar Program.
- B. A Subscriber Organization shall certify to the Utility in writing that the Subscriber Organization has verified the eligibility of all Low-Income Subscribers needed to qualify for the program prior to receiving permission to operate from the Utility.

XII. SUBSCRIPTION TRANSFERS AND PORTABILITY

- A. A Subscription may be transferred or assigned to the associated Subscriber Organization or to any person or entity who qualifies to be a Subscriber in the CSG Facility.
- B. A Subscriber who desires to transfer or assign all or part of his or her Subscription to an eligible Customer desiring to purchase a Subscription may do so only in

compliance with the terms and conditions of the Subscription contract and the transfer or assignment will be effective in accordance therewith.

- C. A Subscriber who desires to transfer or assign all or part of his Subscription to the Subscriber Organization or to become unsubscribed shall notify the Subscriber Organization.
- D. If the CSG Facility is fully subscribed, the Subscriber Organization shall maintain a waiting list of eligible Customers who desire to purchase Subscriptions. The Subscriber Organization shall offer the Subscription of the Subscriber desiring to transfer or assign their interest, or a portion thereof, on a first-come, first-serve basis to Customers on the waiting list.
- E. A Subscriber that moves to a different premise located within the Utility service territory may change the premises to which the Subscription is attributed, and a Subscriber Organization may not charge an unreasonable transfer fee to such a Customer.
- F. The Subscriber Organization and the Utility shall jointly verify that each Subscriber is eligible to be a Subscriber in the CSG Facility. The CSG Facility Subscriber roll shall include, at a minimum, the percentage share owned by the Subscriber, the effective date of the ownership of that Subscription, and the premises to which the Subscription is attributed for the purpose of applying billing credits. Changes in the Subscriber roll shall be communicated by the Subscriber Organization to the Utility, in written or electronic form, as soon as practicable, but on no less than a monthly basis.
- G. Prices paid for Subscriptions in a CSG Facility shall not be subject to regulation by the Council.

XIII. RENEWABLE ENERGY CREDIT OWNERSHIP

- A. Subscribers are not customer generators.
- B. The ownership and title to all renewable energy attributes or Renewable Energy Credits associated with the CSG Facilities shall belong to the individual Subscribers.
- C. If the Subscriber Organization can demonstrate an increased value provided directly to Subscribers with ownership and title of the RECs by the Subscriber Organization (for example, if the Subscriber Organization believes it can provide greater benefit to its Subscribers by consolidating and selling RECs and crediting its Subscribers with the revenue), the Subscriber Organization is encouraged to provide the Council with support for such a proposal, and the Council may allow the Subscriber Organization to offer Subscribers the opportunity to redeem the value of such RECs on an individual or consolidated basis.

XIV. CONSUMER PROTECTION & DISCLOSURE

A. Unauthorized Subscriptions.

(1) No person shall subscribe a Customer to a community solar energy generation system without the Customer's consent.

(2) A Subscriber Organization may not add a new charge for a new service, existing service, or service option not described in the Subscriber's contract with the Subscriber Organization without first providing notice to the Subscriber and providing them an opportunity to terminate their Subscription without penalty if the new charge is unacceptable to the Subscriber.

B. Discrimination Prohibited.

- (1) A Subscriber Organization may not discriminate against any Customer, based wholly or partly on race, color, creed, national origin, or gender of an applicant for service or for any arbitrary, capricious, or unfairly discriminatory reason.
- (2) A Subscriber Organization may not refuse to provide service to a Customer except by the application of standards that are reasonably related to the Subscriber Organization's economic and business purpose.

C. Prohibition of Unfair, Deceptive, or Abusive Acts or Practices.

- (1) Each Subscriber Organization shall conduct all aspects of its business that touch on Consumers or their interests without any unfair, deceptive, or abusive acts or practices.
- (2) Each Subscriber Organization shall regularly examine and consider the possibility of unfair, deceptive, or abusive acts or practices violations in all aspects of its business that touch on consumers or their interests, including, but not limited to, marketing, sales, origination, contract terms, contract options, installation, servicing, and loss mitigation.
- (3) Subscriber Organizations shall not harass or threaten consumers and should avoid high-pressure sales techniques. Subscriber Organizations should not take advantage of a consumer's lack of knowledge, and if they become aware that a consumer clearly misunderstands a material issue in a community solar transaction, they should correct that misunderstanding. Consumer questions must be answered honestly, Subscriber Organizations may not make any statements to consumers that are false or without a reasonable basis in fact.

D. Advertising, Marketing, and Solicitations.

- (1) Advertising Permitted.
 - (a) A Subscriber Organization may advertise its services.
 - (b) A Subscriber Organization may not engage in an advertising, marketing or trade practice that is unfair, false, misleading, or deceptive.

- (c) All advertising claims must be supported by factual, verifiable sources. Advertising claims should avoid underestimating costs, overestimating performance and overvaluing financial and incentive benefits.
- (d) Subscriber Organizations should be familiar with all advertising laws, rules, regulations, and guidance, including federal, state, and local guidance on advertising and marketing.
- (e) Prices quoted must be accurate and complete, including, but not limited to disclosure as to any initial pricing incentives, such as "teaser rates" that include future price increases, and whether the quoted price includes any price incentives, such as government tax incentives or utility program incentives, and the terms of eligibility for such incentives.
- (f) Any projections of future utility prices presented by a Subscriber Organization or its Agents to consumers must be based on accepted sources and methods. They must be clearly identified, verifiable, and be based on one or more of the following sources:
 - Energy Information Agency ("EIA") data from the Annual Energy Review, Annual Energy Forecast, Monthly Energy Forecast, or similar EIA publications for the state in which the system is located;
 - (ii) Council resolutions, orders, publications, or filings with the Council by the Utility;
 - (iii) Industry experts or other qualified consultants; or
 - (iv) Other similar reliable sources qualified by the Council or CURO office.
- (g) Accepted methods for Utility electricity price projections include:
 - (i) If based on historical data for the utility servicing the installation site, combined average growth rate using no less than five years of data ending with the most recent year for which data is publicly available;
 - (ii) If based on projections of third-party sources, then it must be an accurate representation of any data within the timeframe of the source of the data, and when projecting beyond the timeframe of the source data, a combined average growth rate projection using a time period that is the greater of source data timeframe or five years.
- (h) Any endorsements of the Subscriber Organization or its products or services by individuals used in any media format either owned by the Subscriber Organization or initiated or sponsored by the Subscriber Organization through media owned by a third party must be authorized by the endorser, accurate, genuine, in proper context, and without misrepresentation, whether the misrepresentation is affirmative or by omission. It must be clear as to whether the endorser is providing an opinion as a consumer with true firsthand experience, as an expert, or as a spokesperson, and

transparent as to whether any connections exist between the endorser and the Subscriber Organization beyond that which a consumer would ordinarily expect.

- (2) Marketing.
 - (a) A Subscriber Organization's marketing or solicitation information shall include the name under which the Subscriber Organization is registered with CURO.
 - (b) A Subscriber may use an Agent to conduct marketing or sales activities. A Subscriber Organization is responsible for any fraudulent, deceptive, or other unlawful marketing performed by its Agent while marketing or selling Subscriptions on behalf of the Subscriber Organization.
 - (c) Subscriber Organizations and their Agents must follow all applicable marketing laws, such as the National Do Not Call Registry, the CAN-SPAM Act of 2003, etc.
 - (d) Door-to-door marketing and sales: A Subscriber Organization may not permit a person to conduct door-to-door marketing on its behalf until it has obtained and reviewed a criminal history record.
 - (e) A Subscriber Organization must issue an identification badge to any persons conducting door-to-door sales on its behalf to be worn and prominently displayed when conducting door-to-door activities or appearing at public events on behalf of the Subscriber Organization. The badge must accurately identify the Subscriber Organization, and display the employee or Agent's full name and photograph. When conducting door-to-door activities or appearing at a public event, the Subscriber Organization's employees and Agents may not wear apparel or accessories or carry equipment that contains branding elements, including a logo, that suggests a relationship that does not exist with a utility, government agency, or another Subscriber Organization.
 - (f) A Subscriber Organization shall ensure the training of its employees and Agents on the following subjects:
 - Local, state and federal laws and regulations that govern marketing, telemarketing, consumer protection, and doorto-door sales as applicable to the relevant types of marketing and jurisdictions;
 - (ii) The consumer protections set forth in these Rules, including the prohibition on unfair, deceptive, or abusive acts or practices; and
 - (iii) The Subscriber Organization's products, services, and contracts.
 - (g) Geographic marketing permitted.
 - (i) A Subscriber Organization may market services on a geographic basis.
 - (ii) A Subscriber Organization is not required to offer services throughout an electric company's entire service territory.

(iii) A Subscriber Organization may not refuse to provide service to a Customer based on the economic character of a geographic area or the collective credit reputation of the area.

E. Creditworthiness.

(1) A Subscriber Organization shall apply uniform income, security deposit, and credit standards for the purpose of making a decision as to whether to offer a Subscription to Customers within a given class, provided that the Subscriber Organization may apply separate sets of uniform standards for the purpose of promoting participation by low-income retail electric Customer.

F. Subscriber Funds

(1) Subscriber funds, including deposits, collected by the Subscriber Organization in advance of commercial operation of a CSG Facility, shall be held in escrow. The escrow shall be maintained by its terms until such time as the CSG Facility commences commercial operation as certified by Utility acceptance of energy from the CSG Facility.

G. CSG Facility Reporting

(1) Production from the CSG Facility shall be reported by the Subscriber Organization to its Subscribers at least monthly. To facilitate the tracking of production data by Subscribers, Subscriber Organizations are encouraged to provide website access to Subscribers showing real time Output from the CSG Facility, if practicable, as well as historical production data.

H. **Required Disclosures**.

- (1) Contract Summary.
 - (a) Prior to the time that a contract for a Subscription to a community solar project is executed, a Subscriber Organization shall present the Customer with a completed Contract Summary Disclosure using the form that is approved by the Council. A Customer shall be allowed no less than three days to review the Contract Summary Disclosure prior to execution of the contract and the terms of the contract offered to the Customer may not be changed during that three-day period. At a minimum, the Contract Summary must include:
 - (i) Start and end date of the contract.

- (ii) Renewal provisions, if any. If renewal provisions are automatic, explanation of when consumer may cancel renewal without penalty.
- (iii) Ability of consumer to terminate early, early termination penalty, if any.
- (iv) Ability of developer to terminate contract early, and any remedy provided to consumer.
- (v) Ability of consumer to transfer Subscription to another consumer. Ability of consumer to transfer bill credit to new address in ENO service territory.
- (vi) All one-time payments or charges, including any deposit.
- (vii) All recurring payments or charges.
- (viii) All penalties or fees to which the consumer may be subject.
- (ix) Total amount to be paid by consumer under contract.
- (x) Billing and payment procedure.
- (xi) Whether consumer owns or leases the solar panel or capacity and statement that consumer owns RECs.
- (xii) Contact information of developer where consumer may call with questions. Must include physical address, telephone number and email address.
- (xiii) Address, phone number and email contact information for the CURO.
- (xiv) Statement that any bill credits are dependent upon the performance of the solar panels and the prevailing electric rates, which may change over time.
- (xv) Notice that contract does not include Utility charges.
- (xvi) Notice that developer makes no representations or warranties concerning the tax implications of the contract and consumers should consult a tax professional for such information and advice.
- (b) The Customer shall initial a copy of the Contract Summary Disclosure to acknowledge receipt of the Contract Summary.
- (2) Notice of Subscription.
 - (a) A Subscriber Organization shall provide notice of Subscription of a Customer to the utility in a format consistent with Council orders.
 - (b) A Customer entering into an agreement with a Subscriber shall receive written notice of enrollment from the Subscriber Organization and the Utility.
 - (c) Notice of enrollment shall include the following:
 - (i) Customer name;
 - (ii) Customer service address;
 - (iii) Billing name;
 - (iv) Billing service address;
 - (v) Utility name;

- (vi) Utility account number;
- (vii) Subscriber Organization name;
- (viii) Subscriber Organization account number; and effective date of the enrollment.

I. Contracts for Customer Subscription in a Community Solar Project

- (1) Minimum Contract Requirements: A Subscriber Organization's Subscription contract shall contain all material terms and conditions, stated in plain language, including the following:
 - (a) A description of the transaction, including:
 - (i) Whether the Subscriber will own or lease a portion of the community solar project;
 - (ii) A statement that all Renewable Energy Credits generated by the Subscriber's portion of the project are the property of the Subscriber;
 - (iii) A statement that any bill credits are dependent upon the performance of the solar panels and the prevailing electric rates, which may change over time; and
 - (iv) Notice that the contract does not include utility charges.
 - (b) The Subscriber Organization's obligation to maintain its registry with the Council for the duration of the contract.
 - (c) Term of the contract, including:
 - (i) Start and end date of the contract;
 - (ii) Renewal provisions, if any. If renewal provisions are automatic, explanation of procedure for consumer to cancel renewal without penalty;
 - (iii) Ability of consumer to terminate early and the corresponding early termination penalty, if any;
 - (iv) Ability of developer to terminate contract early, and any corresponding remedy to be provided to the consumer, if any.
 - (d) Transferability and portability.
 - (i) The ability of the consumer to transfer Subscription to another consumer.
 - (ii) The ability of the consumer to transfer the bill credit to a new address within the same Utility service territory.
 - (e) The ability of the consumer to reduce the size of their commitment and any fees or penalties related thereto.
 - (f) The total amount to be paid by the consumer under the contract, including:
 - (i) A clear statement of the total amount;
 - (ii) A listing of all one-time payments or charges, including any deposit, and whether the deposit is refundable;
 - (iii) A listing of all recurring payments or charges (monthly, annually, etc.);

- (iv) A listing of any penalties or fees to which the consumer may be subject and the conditions under which such penalties or fees would be applied.
- (g) Billing and payment procedure.
- (h) The data privacy policy of the Subscriber Organization, including what data will be collected, for what purpose and to whom the developer may disclose the data.
- (i) Evidence of insurance.
- (j) A long-term maintenance plan for the project.
- (k) The current production projections for the project and a description of the methodology used to develop production projections.
- (1) Contact info of Subscriber Organization where consumer may call with questions, including the physical address, telephone number and email address of the Subscriber Organization.
- (m) Notice that the Subscriber Organization makes no representations or warranties concerning the tax implications of the contract and consumers should consult their tax professional.
- (n) Any other terms and conditions of service.

J. Disclosure of Subscriber Information.

- (1) Except as provided under these Rules, or otherwise ordered by the Council, a Subscriber Organization may not disclose energy usage or personally identifiable information about a Subscriber, or a Subscriber's billing, payment, and credit information, without the Subscriber's consent.
- (2) A Subscriber Organization may disclose a Subscriber's billing, payment, and credit information for the sole purpose of facilitating billing, bill collection, and credit reporting.
- (3) A Subscriber Organization shall provide a Customer with a copy of the Subscriber Organization's Customer information privacy policy.
- (4) A Subscriber Organization shall treat information received from prospective Customers, including those who do not subscribe, in accordance with provisions (a) and (c) of this section.

K. Subscription Disputes.

- (1) Any person who believes that a Subscriber Organization has violated the Consumer Protection Provisions contained herein in a manner that aggrieves that person may send a written description of the alleged violation to the Council, through its CURO. The written description shall include the name of the Subscriber Organization, a concise description of the alleged violation, and the complaining person's ("Complainant") name and contact information.
- (2) The Council may, through CURO, request and obtain additional information regarding the alleged violation from the Complainant and the Subscriber Organization. CURO shall also assess whether the

Complainant has informed the Subscriber Organization of his or her complaint and given the Subscriber Organization an opportunity to resolve the issue to the Complainant's satisfaction without Council intervention.

- (3) If, based on the information obtained by CURO, the Council finds there is cause to believe a violation of the Council's regulations may have occurred, and the Complainant and Subscriber Organization have not been able to resolve the issue without Council intervention, the Council shall establish a procedure to allow both parties to present their arguments and evidence to the Council for review.
- (4) If, after thorough review by the Council, the Complainant's allegations are substantiated and a violation of the Consumer Protection Provisions is determined, the Council may order the Subscriber Organization to refund any overcharge or fees paid by the consumer as a result of the violation, if applicable. The Council may also, in its discretion, revoke a Subscriber Organization's registration as a result of any violation of the Consumer Protection Provisions contained in this section.
- (5) All other contract or legal disputes that arise between a Subscriber and the Subscriber Organization shall be brought in the appropriate city or district court in the City of New Orleans.