COOPERATIVE ENERGY FUTURES
COMMUNITY POWERED ENERGY

March 4th, 2022

Illinois Power Agency
ipa.contactus@illinois.gov
105 W Madison Street, Suite 1401
Chicago, IL 60602

Dear Illinois Power Agency,

Cooperative Energy Futures appreciates the opportunity to submit these comments on the draft 2022 Long-Term Renewable Resources Procurement Plan. While our cooperative has not yet been active in Illinois, we have been in regular consultation with non-profit advocacy stakeholders, grassroots community-based organizations, solar developers active in Illinois, and analysts researching community benefit approaches for the Solar for All program and community solar portions of the Adjustable Block Program. We are dedicated to low-income access and community ownership of shared solar projects in our member communities in Minnesota, and committed to supporting local communities in other parts of the country to ensure ownership, control, and profit-sharing in local solar projects. We are currently exploring potential collaborations with community-based organizations and solar developers in Illinois to help facilitate these models through the Community-Driven Community Solar portion of the Adjustable Block Program, and potentially through the Equity-Eligible contractor portion of the Adjustable Block Program and/or the community solar portions of the Solar for All program. We hope these comments will shed light on options for low-income access and community ownership from our experience in Minnesota, and we hope to be able to support similar efforts in the coming years in Illinois.

About Cooperative Energy Futures:

Cooperative Energy Futures (CEF) is a member-owned cooperative business (Minnesota 308B Cooperative Association) with around 950 member owners, most of whom are individuals and households who subscribe to cooperatively owned community solar. We have developed and own and operate 8 community solar gardens – a mix of rooftops, parking canopies, and rural ground-mounts – totaling around 7MW of community solar with over 85% residential subscribers. Our membership is constantly increasing as we bring on new community solar gardens, and we expect to roughly double our membership over the next year as we bring 6 new community solar projects with a combined capacity of 7MW online.

CEF plays the following community solar roles:

- **Developer or co-developer**; we either secure and manage all stages of project development or partner with other solar developers to get projects up and running
- **Long-term owner and operator**; we structure the financing, ownership, and operation for our projects to ensure cooperative ownership and maximize member benefit.
- **Member-subscriber engagement and support**; both directly and through community-based partnership organizations, we engage subscribers – who become our member-owners – and manage and administer our subscriptions through our in-house subscription management platform.

CEF has a central focus on creating access for low-income households, communities of color, and renters. We partner directly with organizations and groups of residents based in manufactured housing parks, affordable housing developments, and specific cultural and immigrant communities to unite energy users as cooperative member owners. Unlike most community solar operators, we do not screen subscribers by credit or income, a process which statistically excludes a significant portion of low-income residents and residents of color, many of whom are renters. Instead, we have utilized a unique relationship with institutions that we call back-up subscribers to absorb additional project capacity temporarily when there is residential vacancy. While we do not individually income qualify our subscribers, demographic analysis by a graduate team at the University of Minnesota has estimated our subscriber base at between 38% and 51% composed of households below 80% of Area Median Income. We are currently a part of a National Renewable Energy Lab study completing further demographic and equity analysis of our subscriber base.

As a cooperative, our subscribers become member owners. This yields:

1. Direct democratic control of our cooperative; 1 member, 1 vote, including rights to participate in our annual Board elections, vote in and initiate other key member decisions, and run for our Board of Directors.
2. Profit sharing in accordance with the proportion of energy subscribed. Like other cooperatives, this structure shifts the allocation of surplus benefits from those who have upfront cash to invest in a business - as in a traditional shareholder-owned business – to those who use the business and thus generate its profits. These profit distributions take place through a combination of cash distributions and equity accounts that build over time. For many members, this is a unique path to building long-term assets simply by using energy.

A cooperative structure like ours allows a wide range of households to gain the benefits of ownership – shared decision-making power, shared profits and asset building – without the personal risks and need for qualified expertise of being solely in charge of maintaining a clean energy asset. We are able to create access to ownership and wealth building without requiring significant upfront investment – our one-time membership share purchase is $25, and the equity and distributions members earn is through their continued payment of monthly subscription charges that are lower than the utility bills they would have paid without participating in community solar.

A cooperative pools the resources of hundreds of members to enable qualified management and maintenance to ensure projects are in good working order and subscriber moves and transitions are handled efficiently while ensuring that excess revenues flow back to the members. Being a cooperative also offers further channels for involvement, whether by shaping new projects and initiatives of the cooperative (in other areas and beyond community solar), building member's capacity to participate as stakeholders in the public policy process, or by further financial investment through cooperative preferred stock.

Launching successful clean energy projects is difficult and complicated, especially in environments with intersecting and evolving state and federal public policy frameworks and incentives, utility interconnection requirements, local permitting rules, and design, procurement, and construction supply chains. It's a tough lift for any one community to navigate and master on its own, and prohibitively time consuming for most communities to accomplish as a one-off project. That is why we have developed as a platform cooperative, uniting many local communities in urban, suburban, and rural Minnesota in one member-owned business. This has allowed us to build expertise in project development and management, create shared systems and processes to support our members, and scale through a growing network of member communities. Our members' participation is anchored in local projects – in their community, and often developed through the leadership of members and the community-based organizations they are connected to – but connected to other members and other communities across the state.

Our community solar projects include:

- Faith-based partnerships hosting community solar on the roofs of local churches with outreach partners in local mosques to serve neighborhood residents.
- Collaborations with local governments to host community solar on the roofs of public buildings for the benefit of city residents.
- Canopies over multi-level parking garages owned by state agencies and hospitals.
- Rural projects designed with pollinator-friendly landscaping and linking farming communities with growing immigrant populations and renters in smaller Minnesota cities and towns.

CEF believes that “community” in community solar should mean:

- **Community Access:** The whole community can participate, including renters, low-income households, communities of color;
- **Community Creation:** Local governments and organizations can envision and launch projects to benefit their community;
- **Community Ownership:** Local people who participate in community solar should have control and reap the benefits of projects;
- **Community Wealth:** Job creation, business development, and profit from local clean energy should equitably benefit our communities.

CEF believes that the strongest cooperatives stay rooted to their members and their local communities, while also reaching out to foster similar efforts in other geographies. We are a founding member of the People’s Solar Energy Fund, a national network of cooperative, nonprofit, and tribal and public entities providing peer support, technical assistance, and coordinated financing for community ownership of community solar focused on low-income communities and communities of color nationwide. We have also directly supported emerging cooperative clean energy efforts in Wisconsin, Michigan, Ohio, Oregon, California, and tribal communities in the Dakotas.

We have begun discussions around collaborative project development with community-based organizations and environmental justice groups in the greater Chicago area. We are currently evaluating potential partnerships to help launch a local clean energy cooperative through community solar projects under the new Community-Driven Community Solar program. We’re looking to collaborate with public agencies and advocates and with local community-based organizations to support and incubate models like ours in Illinois. We can bring to the table experience and practical services around:

- Site selection, assessment, and permitting
- Project design and installer selection and management, including bidding design to prioritize and build capacity for minority workforce and disadvantaged business enterprises guided by community priorities.
- Project structuring and financing
- Member/subscriber acquisition and management, including associated subscriber management software
- Cooperative formation, management, and wealth building

Comments on Community-Driven Community Solar and Other Issues

Cooperative Energy Futures believes the proposed updates to the Community-Driven Community Solar program in the draft 2022 Long-Term Renewable Resources Procurement Plan are a striking improvement from the interim program released in December 2021. We believe the proposed rates, evaluation criteria, and encouraged integration with other capacity building programs (eg. around workforce development, preapprenticeship, returning residents, and contractor incubation and acceleration) will provide a workable space for a range of community-based efforts to emerge and succeed.

We don't believe this success will emerge on its own. From our experience in Minnesota, building effective community-led energy development requires extensive and persistent community education, training, and capacity building to enable truly community-led projects. Without such effort, it is likely that most successful projects will be initiated by experienced outsiders finding and partnering with community-based organizations. While this is not itself a problem – and is in fact the position that we ourselves find ourselves in as we contemplate co-developing projects with local partners – it is not the ideal outcome. To the extent we engage in Illinois programs, it will be to help get projects off the ground to build the capacity of one or more emerging locally-led community solar cooperatives that can facilitate their own projects in the years to come. We believe the Illinois Power Agency and other supportive stakeholders should see that outcome as their goal as well, and develop ongoing capacity building and technical assistance programs to help communities grow into local clean energy leadership.

We also believe our model can help address the cash flow challenges that truly community-driven projects can face. We know first-hand the challenges of being a small and emerging cooperative that is committed to negotiating financier relationships that retain maximum control of profits for local communities. We have developed several innovative strategies that together enable communities to leverage outside capital, create opportunities for community investment, enable ownership for community members regardless of wealth, property ownership, or ability to invest, and keep control local. We look forward to collaborating with other stakeholders to help leverage these strategies to help get community-driven community solar projects off the ground in a way that incubates and builds capacity for community-led and community owned clean energy cooperatives. We would be happy to collaborate to host further dialogues or workshops on these models.

Finally, while we have no specific requests or recommendations on this topic at this time, we wish to highlight the challenges presented by the complexity of Illinois's many options for qualifying community-benefiting projects. Rather than justifying a pause, we are raising this concern to invite ongoing dialogue over the coming years as these programs mature:

- On the one-hand, the clear policy direction towards a wide range of equity goals that Illinois has advanced through the Solar For All program, Community-Driven Community Solar, and Equity Eligible contractor priorities is admirable and much appreciated. We deeply wish we had this level of policy clarity and commitment to justice in Minnesota's clean energy policy framework. We're sure advocates in many other states feel similarly.
- On the other hand, the program structure around these priorities is compartmentalized and disaggregated; presuming a choice between programs. We recognize that there are valid and valuable projects that will meet the criteria of Solar For All but not the criteria for Community-Driven Community Solar or Equity-Eligible contractor requirements (and visa versa). In many cases, however, the highest value can be achieved through projects that successfully meet two or even all three program goals. We are a member-controlled organization developing deeply accountable, low-income-focused projects that build opportunities for minority contractor participation. When presented with the Illinois policy context, navigating which program opportunities are likely to be most relevant, valuable, and scalable has been quite confusing. This is especially true as program rules evolve – the process of assessing the viability of these multiple options has been one of constant flux and uncertainty.
- The highest goal in our opinion should be growing a solar industry that fully integrates tackling energy poverty for low-income households, building community wealth and empowerment through community ownership, and advancing racial and economic justice in the contracting and workforce sectors. Projects that exemplify all three should have the easiest pathways forward, and projects that already prioritize one or two of these goals should have incentives to advance all three. Over the coming years, we encourage the Illinois Power Agency and other stakeholders to consider how incentive structures and program administration and application processes for these vital equity goals could be more thoroughly integrated and synergized.

Community Wealth Building Through Cooperatives and the Partnership Flip:

Existing comments and analysis on the record highlight several of the challenges to community ownership of solar:

- The structure of the investment tax credit and typical limitations that it apply to passive income for larger community solar projects make it hard for aggregations of individual households or small development organizations serving them to use tax credits. This requires involvement of outside investors, dramatically complicating ownership.
- Standard market assumptions that ownership requires upfront investment create a systemic barrier to equitable participation in community ownership. This assumption

also entrenches the logic that the meaningful economic contribution deserving of return is the provision of upfront capital but not the ongoing patronage of community solar – which is ultimately what generates project revenue.

- Securities restrictions limiting investment opportunities in various ways (different securities exemptions permit investment only by accredited investors, small numbers of investors without advertising, the general public investing small amounts through online crowdfunding portals that add meaningful expense, etc.).
- Desire for many capital providers (lenders and equity investors) to fund large-dollar transactions (in the tens or hundreds of millions or even billions) and work with large developer counterparties with substantial balance sheets.

All of these barriers are very real and have so far made community ownership of clean energy the exception and not the rule. They are also not insurmountable, and a combination of strategic business model design and supportive policy and programs can help communities overcome them. We are providing below a basic outline of some of the core elements of the strategy we have used to overcome these barriers that could be helpful in the Illinois context.

The Partnership Flip: The partnership flip is one of the most common mechanisms to monetizing the Investment Tax Credit and associated depreciation benefits of solar projects through outside investors who invest specifically for that purpose. Typically, the two parties in the Special Purpose Entity that owns the project are a Sponsor or Managing Member who invests equity and expects to hold and manage projects long-run and an Investor Member who invests tax equity in exchange for receiving the federal tax credits and depreciation benefits and a small portion of net cash in the near term. While deal structures vary, it is typical to have a tax equity investor contribute between 25%-40% of project capital costs, a Sponsor contributing 5%-20% of project capital costs, and the remainder of capital costs provided by project debt or debt held by the Sponsor. Most commonly, the Sponsor is a private for-profit developer that wants to participate as the long-term owner-operator, but there is no reason that the Sponsor cannot be a community-owned entity – such as a cooperative like ourselves. The Sponsor must be a taxable entity (even if it does not have the volume or type of taxable income to utilize the tax credits) to participate in a tax equity ownership structure.

When used this way, the Partnership Flip model can be particularly powerful for enabling community ownership because:

1. While ownership and tax benefits are almost always allocated 99% to the Investor and 1% to the Sponsor during the first 5 years (to allocate 99% of ITC and tax benefits to the Investor) there is no requirement that net cash (after operating expenses and debt service) be allocated equivalently. Net cash (after a Priority return necessary to ensure

investor tax compliance) can be allocated on a different basis.
2. In a Partnership flip, after the ~5 year tax compliance period, ownership automatically flips, usually to 5%-10% Investor ownership and 95%-90% Sponsor ownership. There is no financial cost to this flip in ownership percentages. While timing and pricing varies by deal, the Sponsor can usually buy-out the remaining 5%-10% Investor ownership stake, either after 6 years or at a later date – often at 2-5% of original project cost.

The Partnership Flip structure is a product of current federal tax law. If federal rules around the Investment Tax Credit change to make the credits refundable (and thus directly usable by a cooperative or similar entities) the structure of such projects will become substantially simpler.

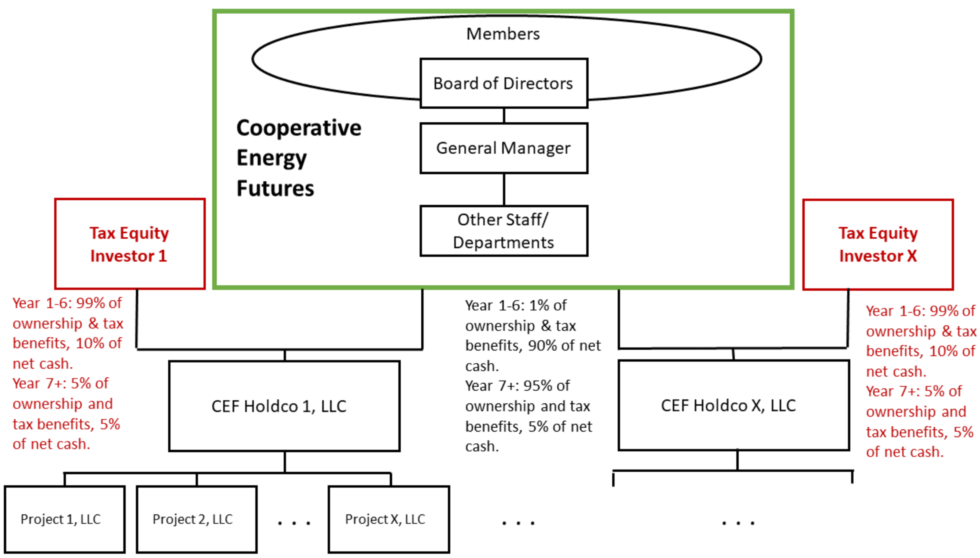
Cooperatives as Partnership Flip Sponsors as a Way to Build Community Wealth: CEF and other for-profit (taxable) cooperatives can serve as Sponsor entities in a Partnership flip, thus securing the ability to take 90%-95% ownership of projects automatically after 6+ years and take 100% ownership usually between years 6-10 for a relatively modest cost. If structured correctly, this approach can also result in meaningful financial benefits to the cooperative during the first 6 years through a combination of:

1. contractual project management payments (assuming the cooperative has a meaningful scope of work managing subscribers and potentially operations and maintenance)
2. profit distributions (depending on the negotiated percentage of net cash)

For example, our current projects involve 99% investor ownership and tax benefits, but after operating costs, debt service, and a 2% priority return to the tax investor are paid, CEF and thus our members receive 90% of net cash. Since the operating costs and debt service would likely be present in all scenarios (even without a tax equity partner), the financial outcome of this approach for the community even during the first 6 years is quite similar to full community ownership from the beginning. If the community cannot monetize the tax benefits, after year 6, this approach will often yield even more community benefits than a 100% from year 1 community ownership approach because ongoing capital costs from other debt and equity are substantially reduced by the presence of a tax equity investor.

The cooperative also serves as a direct channel to distributing these net benefits to community members. In our approach, community members subscribe via a contractual relationship with the Special Purpose Entity that owns the solar garden they are subscribed to, but become members in Cooperative Energy Futures as a whole. As subscribers, they participate in community solar much like a typical subscriber to a third-party owned project – receiving utility bill credits and paying monthly for their subscription. However, subscribers are also member-owners of Cooperative Energy Futures, which is participating as the Sponsor and long-term full owner in each Special Purpose Entity. As the cooperative profits from its ownership in these projects, those profits are distributed to members through a combination of direct cash distributions and a growing equity account. Once Investor members exit, the cooperative gains full project control and has fewer restrictions on how it can manage the project to meet member goals (subject to any remaining debt covenants).

Co-ops can develop and manage single projects this way, but doing so requires substantial time and effort compared to the resulting community impact. One-offs also presents significant challenges for investors and lenders who prefer to finance larger project portfolios and work with entities that have scale and the ability to build experience and management capacity over time. Aggregation can also allow co-ops to gain efficiencies through shared administrative and management services. This goal can be achieved by the cooperative aggregating multiple projects into portfolios that are each a separate tax equity investor partnership and serializing portfolios over time. A stylized chart of how this structure works for CEF is provided below.



The cooperative can choose to establish allocation units as authorized under its Bylaws that isolate the net profits and distributions to members within each project or aggregate them within all projects in the same portfolio, or across all projects in multiple portfolios. These decisions involve key cooperative choices around how closely members want their economic trajectory within the co-op to be tied to the single project they benefit from, or based on a collective pool of member projects (which mitigates and spreads risks if some projects faced challenges) as well as operational and accounting considerations.

The cooperative structure can offer the benefits of ownership without meaningful financial risk for members. Like many corporate structures that limit liability, cooperatives enable access to the benefits of clean energy ownership while limiting liability for the individual members to:

1. Their membership share purchase, which can be designed to be deeply accessible. For example, CEF's membership involved a one-time $25 share purchase.
2. Any equity the member builds within the co-op, which is an asset they would not have otherwise had (and could not build under a third-party owned approach).

Finally, the cooperative has a direct incentive to maximize value for members by minimizing costs and ensuring flexible subscription terms. Cooperatives have a structural disincentive to maximize subscription prices, since any excess profits are returned to members. Additionally, member control the Board of Directors helps ensure that community solar offerings are designed to maximize member benefit and ensure the greatest viable subscriber flexibility.

Capital Needs for Cooperative Sponsor Entities: To be an effective community-owned project Sponsor, and thus be able to secure for its community the substantial economic and intangible benefits that come with ownership, a cooperative sponsor entity needs to be able to:

1. Provide the initial sponsor equity investment, usually 5%-20% of project costs
2. Demonstrate that it is a stable and viable counterparty to tax equity investors and lenders, typically a determination reliant on operating history, external guarantees, financial position, and management strength.
3. Develop projects that reliably cover operating costs, debt service, and priority returns.
4. Be ready to buy out an investor after the flip date after ~6 years of project operation.

Again, these requirements can be structured at the cooperative level, without requiring upfront investment or personal liabilities to members, but they nevertheless require sources of capitak. CEF has had success structuring voluntary member investment offerings using Minnesota cooperative securities exemptions as well as other national accredited investor exemptions to secure over $2.5M in direct capital investment to date. Similar strategies can be deployed elsewhere, especially in states with clear cooperative securities exemptions. We also hope to be able to use our existing scale, track record, and financial standing to help partner with and incubate emerging cooperatives in Illinois.

Direct support for community-owned entities would also be helpful for getting such projects off the ground. Some mechanisms by which such support could be provided include:

- Upfront grants or deferred loans directly to qualifying community-based entities to provide part or all of their Sponsor equity contribution into such projects. If structured as deferred loans, they would need to be either unsecured or secured to the Sponsor's membership interests in project companies in a way that is clearly subordinated to project lender and Investor member interests to enable project financeability. Interest rates and timeframes of such deferred loans would also need to be structured to match expected cash flow for the Sponsor, with reasonable flexibility.

- Loan guarantees and/or tax equity recapture guarantees to establish balance sheet security for new community-based project Sponsors. For well-structured projects, these guarantees would likely never be drawn (risk of tax credit recapture is very low, loans almost always include loan interest reserves to cover any minor operating shortfalls), but having the guarantees in place provides the security that private lenders and investors are looking for when working with smaller and newer entities.
- Grants or subordinated debt financing established to enable investor buy-out after the flip period. Given that such buyout will not occur for 6 years, such support will not be needed right away, but the greater the security of such support being available when the time comes would further enhance capacity for community ownership.

Workable business models will emerge even without these types of support. The scope, diversity, and accessibility of Community-Driven Community Solar projects will likely remain limited to business models with meaningful preexisting financial resources without them.

Once again, we appreciate the opportunity to comment and hope to collaborate to make the vision of Community-Driven Community Solar a reality in Illinois in the years to come.

Sincerely,

Timothy DenHerder Thomas

Timothy DenHerder-Thomas
General Manager
Cooperative Energy Futures
timothy@cooperativeenergyfutures.com