



Tennessee Solar for All Stakeholder Meeting

July 19, 2024

Agenda

- Overview of the Solar for All Grant Program
 - Federal Award Information
 - Solar for All Scope
 - Residential Rooftop Solar
 - Residential-Serving Community Solar
 - Stakeholders and Roles
 - Financial Assistance Models
 - Planning Period
- Recent Updates
- Ongoing Efforts
- Timeline and Next Steps
- Q&A

Federal Award Information

- TDEC OEP applied for the maximum grant of \$250,000,000 under the “medium” category
- TDEC OEP was notified of selection for an award of **\$156,120,000**
 - \$400,000 reserved for services from the National Solar for All Technical Assistance Program
- TDEC OEP is currently working with EPA to scale down the budget and workplan
- TDEC OEP’s award from EPA has a start date of September 1, 2024

EPA's Solar for All Scope

- The Solar for All program is intended to **ensure low-income households have access to residential rooftop and residential-serving community solar energy**, through providing financial assistance and other incentives.
- Solar programs **can extend beyond solar generating capacity to include associated storage and enabling upgrades** that allow for the deployment of solar energy in low-income and disadvantaged communities.
- Programs **may also include solar project-deployment technical assistance such as workforce training programs** that enable underserved communities to participate in the economic opportunity created by the energy transition.

Residential Rooftop Solar (EPA Definition)

- Behind-the-meter solar photovoltaic (PV) power-producing facilities, including rooftop, pole-mounted, and ground-mounted PV systems, that support individual households in existing and new single-family homes, manufactured homes, and multifamily buildings.
- The definition of residential rooftop solar includes behind-the-meter solar facilities serving multifamily buildings classified as commercial buildings so long as the solar facility benefits individual households either directly or indirectly such as through tenant benefit agreements.
- Residential rooftop solar includes properties that are both rented and owned.

Residential-Serving Community Solar (EPA Definition)

- A solar PV power-producing facility or solar energy purchasing program from a power-producing facility, with up to 5 MW nameplate capacity, that delivers at least 50% of the power generated from the system to multiple residential customers within the same utility territory as the facility.
- There are a variety of community solar ownership models that can be considered, including community-owned solar, third-party-owned community solar, and utility-owned community solar.

Tennessee's Solar for All Program

- The Tennessee Department of Environment and Conservation's Office of Energy Programs (TDEC OEP) is the lead for the Tennessee Solar for All Program and will design and implement the Tennessee Solar for All Program.
 - TDEC OEP will engage TVA's Renewable Programs Team to inform elements of program design.
 - Solar for All will **leverage TVA's existing programs**, such as the Flexibility Program and the Dispersed Power Program, and will consider LPC utilization of the Flexibility Program.

Financial Assistance Models

- **Financial Assistance** will serve both a **Statewide Program** and community-based **Local Project Implementation Teams** across the state.
 - Financial Assistance as defined by EPA can be found on slide 21 of this presentation.
 - As part of the program design process, TDEC OEP will define both “Local Project Implementation Teams” and the “Statewide Program” with regard to identification, process, expectations, and roles/responsibilities for each, etc.
- Grants will be issued to support solar infrastructure, storage, and “enabling upgrades.”
 - TDEC OEP will also explore other financial models to support the sustainability of the program (e.g., escrow for ongoing O&M) and maximize the use of EPA's funding.
- **Financial Assistance Options will be confirmed during the one-year planning period.**

Planning Period

- TDEC OEP elected to include a one-year program planning period in its application to provide time to refine program plans after receiving an award from EPA and before beginning to deploy financial and technical assistance.
- TDEC OEP's one-year planning period will begin on **September 1, 2024**, and end on **August 31, 2025**.
- During the planning period, OEP will:
 - Complete revisions to the budget and workplan
 - Define both “Local Project Implementation Teams” and the “Statewide Program” with regard to identification, process, expectations, and roles/responsibilities for each, etc.
 - Issue a Request for Proposal for a Statewide Program Implementer
 - Refine Project Deployment Technical Assistance, including Workforce Development plans

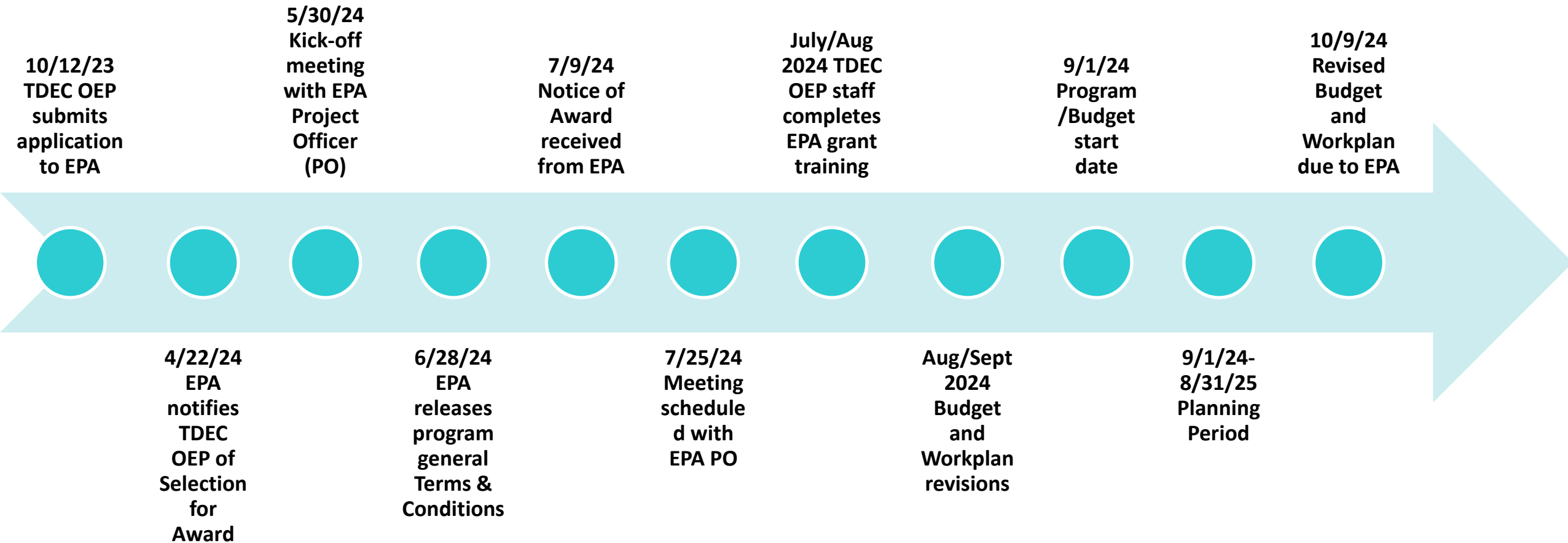
Recent Updates

- TDEC OEP staff attended multiple EPA trainings on Quality Assurance Plans (6/5/24, 6/24/24, 6/26/24, 6/27/24)
- TDEC OEP received a Notice of Award from EPA (7/9/24)
- TDEC OEP staff attended an EPA webinar on Grant Terms & Conditions (7/10/24)
- EPA released additional guidance to update the Program workplan and budget (7/15/24)
- TDEC OEP has joined the Leadership Team for the National Association of State Energy Office's Solar Working Group

Ongoing Efforts

- Engagement with EPA Project Officer
- Engagement with the Clean Energy States Alliance (CESA)
- Completing mandatory EPA Grant Recipient training
- Solar for All Program Lead job opening expected to post in early August
- Creation of Quality Assurance Project Plans
- Budget and Workplan revisions in alignment with new guidance and Special Terms and Conditions
 - Both items are due to EPA 90 days after the Notice of Award (10/9/24)
 - TDEC OEP is still awaiting feedback from EPA on a few specific questions
- TDEC OEP plans to advance work with TVA, an LPC, and a publically owned multi-family property to complete a case study in August

Timeline and Next Steps



Questions

Solar for All questions can be directed to:

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APPENDIX A
Definitions & Terminology (EPA Notice of Funding Opportunity)

Meaningful Benefits

- **Household Savings:** Deliver a minimum of 20% electricity bill savings to all households served under the program.
- **Equitable Access to Solar:** Ensure the program increases access to solar generation for low-income and disadvantaged communities.
- **Resilience Benefits:** Create capacity to deliver power to low-income and disadvantaged communities and households during a grid outage.
- **Community Ownership:** Facilitate ownership models that allow for low-income and disadvantaged communities and households to own assets.
- **Workforce Development & Entrepreneurship:** Invest in high-quality jobs and businesses in low-income and disadvantaged communities.

Associated Storage

- Infrastructure to store solar-generated power for the purposes of maximizing residential rooftop and residential-serving community solar deployment, delivering demand response needs, aggregating assets into virtual power plants, and delivering residential power during grid outages.
- Financial assistance for associated storage must be deployed in conjunction with financial assistance for a solar PV system and the storage asset must be connected to the solar PV system.

Capital Mobilization

- For this competition, capital mobilization refers to additional capital contributions made toward qualified projects as a result of the grant's activities. Applicants may define methodologies to set goals and targets for capital mobilization for the purposes of their applications. An example methodology is provided below; applicants that do not use this methodology will not be penalized.
 - Capital mobilization is defined as the total capital contributions toward projects that are financed by the grantee, excluding grant funds; under this definition, capital mobilization for a particular project may be calculated as total capital contributions toward the project, less grant funds committed to the project by the grantee. Total capital contributions may include financing provided by the grantee with funds raised from private capital providers (including through balance-sheet leverage and securitizations), additional sources of financing provided to project sponsors from private capital providers, equity contributions from project sponsors, and sources of public capital including tax increment financing and other tax incentives. Private capital mobilization is defined as a subset of capital mobilization, excluding capital contributions from public entities, including federal, state, and local government entities (such as tax credits and other financial incentives) other than grant funds provided under this competition.
 - For this competition, the capital mobilization ratio is defined as the grantee's capital mobilization (as defined above), divided by the grantee's capital commitments through financial assistance (i.e., total financial contributions to the project). The private capital mobilization ratio is defined as the grantee's private capital mobilization (as defined above), divided by the grantee's capital commitments through financial assistance. These ratios exclude the grantee's expenditures for project-deployment technical assistance and program administration activities.

Eligible Zero-Emissions Technology

- Section 134(a)(1) of the Clean Air Act provides that grants be used to provide financial assistance and technical assistance “to enable low-income and disadvantaged communities to deploy or benefit from zero-emissions technologies.” Section 134(c)(4) of the Clean Air Act provides that the term zero-emissions technology means any technology that produces zero emissions of (a) any air pollutant that is listed in Section 108(a) (or any precursor to such an air pollutant) and (b) any greenhouse gas. EPA is implementing this statutory language by identifying the four technology categories that exclusively qualify for financial and technical assistance from Section 134(a)(1). These technology categories are defined below. Note: “distributed solar” is used to refer to residential rooftop and residential-serving community solar throughout this NOFO.
 - Any technology that produces zero emissions of (a) any air pollutant that is listed in Section 108(a) (or any precursor to such an air pollutant) and (b) any greenhouse gas.

Enabling Upgrades

- Investments in energy and building infrastructure that are necessary to deploy and/or maximize the benefits of a residential rooftop and residential-serving community solar project.
- Enabling upgrades can include, but are not limited to, electrical system upgrades, structural building repairs and energy efficiency.
- Applicants may decide the exact types of enabling upgrades that are eligible for Solar for All financial assistance, yet all enabling upgrades should be energy and building infrastructure related and deployed in conjunction with financial assistance for an eligible solar PV system.
- Financial assistance for enabling upgrades may comprise up to 20% of the total financial assistance deployed during the lifetime of the program.

Equitable Access

- Equitable access means all communities, especially historically underserved households and communities, can benefit from this program.

Financial Assistance

- Financial assistance is defined as subgrants, rebates, subsidies, other incentive payments, debt (including loans, partially forgivable loans, forgivable loans, soft loans, subordinate debt), and other financial products consistent with the definition of Federal financial assistance in 2 CFR § 200.1 and Participant support costs in 2 CFR § 1500.1.11 Solar for All financial assistance is intended to enable low-income and disadvantaged communities to deploy and benefit from solar, storage, and enabling upgrades, while ensuring all projects deliver household savings, among other benefits. Most applicants should use at least 75% of program funds on financial assistance and should maximize solar deployment funded by this program. EPA will evaluate proposals more favorably if the applicant proposes to use 75% of program funds or more on financial assistance. Please see Section I.E: Scope of Work for additional guidance and details on applicability.
 - All financial assistance must enable low-income and disadvantaged communities to deploy and benefit from residential-rooftop and residential-serving community solar capacity, associated storage, and enabling upgrades
 - Costs for eligible financial assistance, as defined in Section I.D: Competition Terminology as subgrants, rebates, subsidies, other incentive payments, or loans, consistent with the definition of “federal financial assistance” in 2 CFR § 200.1

Geographically Dispersed Low-Income Households

- GGRF's definition of "geographically dispersed low-income households" includes low-income individuals and households that fall within either of the two categories listed below.
 - Individuals and households with incomes at or below the greater of:
 - For Metropolitan Areas: (1) 80% Area Median Income (AMI) and (2) 200% of the Federal Poverty Level
 - For Non-Metropolitan Areas: (1) 80% AMI; (2) 80% Statewide Non-Metropolitan Area AMI; and (3) 200% of the Federal Poverty Level
 - Individuals and households currently approved for assistance from or participation in at least one of the following income-based or income-verified federal assistance programs, with an award letter within the last 12 months: (1) U.S. Department of Health and Human Services' (HHS) Low Income Home Energy Assistance Program; (2) U.S. Department of Agriculture's (USDA) Supplemental Nutrition Assistance Program; (3) U.S. Department of Energy's (DOE) Weatherization Assistance Program; (4) Federal Communications Commission's Lifeline Support for Affordable Communications; (5) USDA's National School Lunch Program; (6) U.S. Social Security Administration's Supplemental Security Income; or (7) any other verified government or non-profit program serving Asset Limited, Income Constrained, Employed (ALICE) individuals or households designated by the EPA Administrator

Low-Income and Disadvantaged Communities

- Section 134(a)(1) of the Clean Air Act appropriates \$7 billion for the purposes of providing financial and technical assistance to enable “low-income and disadvantaged communities” to deploy and benefit from residential distributed solar. GGRF defines low-income and disadvantaged communities as encompassing the following four categories, as defined below: (a) communities identified as disadvantaged by the CEJST mapping tool; (b) a limited number of additional communities identified as disadvantaged by the EJScreen mapping tool; (c) geographically dispersed low-income households; and (d) properties providing affordable housing.
 - CEJST-Identified Disadvantaged Communities: The Climate and Economic Justice Screening Tool (CEJST) is a publicly-available mapping tool developed by the White House Council on Environmental Quality. GGRF's definition of "disadvantaged communities" includes all communities identified as disadvantaged through the CEJST.
 - EJScreen-Identified Disadvantaged Communities: EJScreen is a publicly-available, place-based environmental justice screening and mapping tool developed by the EPA. GGRF's definition of "disadvantaged communities" includes (1) the limited supplemental set of census block groups that are at or above the 90th percentile for any of EJScreen's supplemental indexes¹⁴ when compared to the nation or state or (2) geographic areas within Tribal lands as included in EJScreen.

Market Barriers (Distributed Solar Market Strategy)

- Examples of market barriers include net metering policies, third party ownership policies, and opaque interconnection processes.

Meaningful Benefits (Rooftop and Community Solar)

- Consistent with Section 134(a)(1), this program must “enable low-income and disadvantaged communities to deploy or benefit” from solar. This program defines “benefit” as the five meaningful benefits of residential rooftop and residential-serving community solar defined below. EPA will evaluate applications on their vision and ability to maximize the following benefits received by low-income and disadvantaged communities.
 - Household Savings: Delivering a minimum of 20% household savings to all households served under the program, including households in multi-family, master-metered buildings; 20% household savings is defined as 20% of the average household electricity bill in the utility territory. Household savings can be delivered as a direct financial benefit or, for households without an individual utility bill, a direct non-financial benefit equivalent in value to the program’s household savings target in the utility territory. Additional detail on how to calculate household savings is included in *Appendix C: Household Savings Guidance*. Applicants may propose preliminary estimates in the financial assistance model for household savings and explain how they plan on refining those estimates during the first year of the program if more analysis is needed. EPA expects to work with grantees to refine estimates for household savings
 - Equitable Access to Solar: Ensuring the program increases access to residential distributed solar generation in low-income and disadvantaged communities through financing products and project-deployment technical assistance, maximizing the breadth and diversity of the households that can benefit from solar
 - Resilience Benefits: Increasing the resilience of the power grid by creating capacity that can deliver power to low-income and disadvantaged households and/or to critical facilities serving low-income and disadvantaged households during a grid outage
 - Community Ownership: Facilitating ownership models that allow for low-income households and disadvantaged communities to access the additional economic benefits of asset ownership
 - Workforce Development and Entrepreneurship: Investing in high-quality jobs and businesses in low-income and disadvantaged communities by supporting prevailing wages, investing in effective workforce training programs for underserved populations (e.g., pre-apprenticeship and registered apprenticeship programs), and prioritizing equitable economic opportunities for women and minority-owned businesses and contractors

Meaningful Benefits (Solar storage)

- The meaningful benefits of solar with storage include:
 - Delivering a minimum 20% of household savings to program beneficiaries;
 - Increasing low-income and disadvantaged households' access to solar through financing products and deployment options;
 - Increasing resiliency and grid benefits by creating capacity that can deliver power to low-income and disadvantaged households and/or critical facilities serving low-income and disadvantaged households during a grid outage;
 - Facilitating ownership models that support low-income households and communities building equity in projects;
 - Investing in quality jobs and businesses in line with the Administration's Good Jobs Principles and Executive Order 14082 (Implementation of the Energy and Infrastructure Provisions of the Inflation Reduction Act of 2022).

Outcomes

- The term "outcome" means the result, effect, or consequence that will occur from carrying out an environmental program or activity that relates to an environmental or programmatic goal or objective.
- Outcomes may be environmental, behavioral, health-related, or programmatic in nature; may be quantitative or qualitative; and may not necessarily be achievable within the period of performance.

Outputs

- The term "output" means an environmental activity, effort, and/or associated work product related to an environmental goal or objective that will be produced or provided over a period or by a specified date.
- Outputs may be quantitative or qualitative but must be measurable during the period of performance.

Period of Performance

- EPA anticipates the start date for programs funded under this funding opportunity will be July 2024.
- All activities funded with the initial grant award must be completed within the negotiated program performance period of up to five years, meaning all program grant funds must be deployed as described in the application.
- In addition, if program income is generated from the program, grantees will be required to retain and reuse program income for additional capital deployment.

Program Administration Activities

- Consistent with 2 CFR § 200.403, expenditures such as program administration costs are allowable under federal awards provided they are necessary and reasonable for the performance of the award-in this program, for the provision of financial assistance and project-deployment technical assistance. Expenditures for program administration activities could include those for program performance, financial and administrative reporting, and compliance, including but not limited to activities to support, monitor, oversee, and audit subrecipients, contractors, and program beneficiaries. Program administration costs include procuring services and tools that support the grantee in program design (e.g., technical assistance from the DOE National Laboratories to support the grantee directly for program design).
 - Costs for staff salaries, technology, and other office supplies, as either direct or indirect costs, in accordance with 2 CFR § 200 Subpart E and the applicant's Federally-approved indirect cost rate under 2 CFR § 200.414; note that costs must be consistently characterized as either direct or indirect as provided in 2 CFR § 200.412
 - Costs for advisory councils to meet the GGRF program objectives. Advisory councils are groups of individuals who are not employees of the grantee or a subgrantee that provide strategic and policy advice to the organization; refer to Item 2 of EPA's Selected Items of Cost Guidance for additional information on the allowability of costs for Advisory councils
 - Costs for reporting and compliance, including those to support, monitor, oversee, and audit subrecipients, contractors, and program beneficiaries
 - Costs for program evaluation activities including the personnel and equipment needed for data infrastructure and expertise in data analysis, performance, and evaluation
 - Indirect costs to the extent authorized by applicable provisions of 2 CFR § 200.414 and EPA's Indirect Cost Policy
 - All costs must meet the requirements for allowability under 2 CFR Part 200, Subpart E as well as applicable provisions of 2 CFR Part 1500.

Project-Deployment Technical Assistance

- Section 134(a)(1) of the Clean Air Act provides that funds for this competition be used for "technical assistance." Technical assistance is defined as "project-deployment technical assistance" and is services and tools provided by grantees to communities and energy stakeholders to overcome non-financial barriers to solar deployment. Examples of these services and tools include workforce training, customer outreach and education, project deployment assistance such as siting, permitting, and interconnection support (including procurement of services and tools from National Labs), and coordination with utilities for the purposes of project deployment.
 - Eligible project-deployment technical assistance includes community engagement strategies, including education, outreach, and dissemination of information to the public; customer acquisition support; management and verification requirements; cross-program coordination specific to project deployment (e.g., engaging with DOE's WAP); workforce training; and other wrap-around program support elements.
 - Eligible technical assistance examples include workforce training, customer outreach and education, project development & deployment assistance (including services and tools from National Labs), and coordination with utilities for the purposes of project deployment
 - Project-deployment technical assistance services should include investments in workforce development, project deployment

Clarification of Electricity Cost Savings vs. Energy Cost Savings

- 20% household savings is defined as 20% of the average household electricity bill in the utility territory (Page 12 of NOFO).