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In response to:
CEC Solar for All Program
[Docket No. 25-SOLAR-01]

About ICAST
ICAST is a 501(c)(3) nonprofit with a mission to provide economic, environmental, and social benefits to underserved communities in a manner that builds local capacity. ICAST has been utilizing its award-winning one-stop-shop (OSS) approach to deliver green solutions to the multifamily (MF) affordable housing (MFAH) market for 20 years. In 2023, ICAST will facilitate energy efficiency (EE) and renewable energy (RE) upgrades in ~50,000 apartments. It has saved nearly 140,000 MF households, created 2,660 sustainable jobs, invested nearly $200 million in local communities, and provided $412 million in lifetime utility cost savings. ICAST is a national leader in designing and managing utility, state, and federal programs that deliver innovative green solutions to low-income and disadvantaged communities (LIDACs).

California Energy Commission SFA RFI (Due March 14th, 2025)

Program Structure

1) **The Solar for All grants must benefit low-income and disadvantaged communities and California Native American tribal residents located in publicly owned utility (POU) territories. Funding must be disbursed by May 2029. What are examples of existing or planned projects/programs that can utilize these funds by the deadline? If possible, provide solar nameplate capacities (kW or MW) or storage nameplate capacities (kWh or MWh).**
    a. We recommend prioritizing SOMAH projects that can utilize the funds by the deadline.
    b. Kern County Housing Authority also has five projects on their affordable housing sites that are in contract for commercial solar, located in Arvin, Bakersfield, and Lamont.

2) **What is the range of costs that are common for residential solar (single- and multi-family), community solar, or associated energy storage systems that serve low-income and disadvantaged communities? This could be expressed as total installed cost or $/kW installed cost, along with describing the associated solar/storage nameplate**

capacities. Please specify if the information provided is California-based and, if not, what region it is based on.

a. The recent average installed cost per watt for a multifamily solar PV system in California is $2.50-per watt. This means the average 170-kilowatt MF system will cost $425,000- $680,000, prior to tax credits and incentives. Historically, SOMAH subsidized 55-100% of system costs, subject to PV system factors.

3) **Given the CEC's Solar for All program has $25 million to award, which of the following program funding allocation structures would be most effective in supporting access to solar and storage for the targeted LIDAC communities and California Native American tribes?**

a. ICAST recommends the following: Competitive solicitation. Eligible program participants submit applications for a competitive grant funding opportunity where applications are evaluated and scored based on criteria pre-specified in the solicitation and the highest scoring applications are awarded.

4) **The primary goals of the Solar for All program are to deliver savings to LIDAC and tribal communities and reduce greenhouse gas emissions (GHG). What should the program prioritize for disbursing awards to help achieve the primary goals? For example, maximize solar megawatt (MW)/$, promote resiliency, or strive for proportional funding distribution?**

a. The SFA program should prioritize projects that are coordinating with/a part of electrification projects.

i. As an example, Tribes and rural communities, in particular, disproportionately rely on propane. This creates a need to electrify away from the source. For many of these cases, beneficial electrification projects need a partnership with solar in order to be most effective – and thus the two should be in alignment.

5) **What level of match funding should an applicant be expected to contribute towards the total project cost (e.g. 0%, 10%, 20%, 30%, or higher), with the remaining portion funded by CEC's Solar for All program?**

a. We recommend requiring a certain amount of leverage for projects, like the DOE has through their WAP's model, where MFAH historically required a 20% cost

share. Almost no utility DSM program offers 100% funding for deep retrofit projects, either, as an example.

6) **Which applicant types should the program work with to maximize deployment/benefits at the lowest cost (including program administration, compliance, etc.)? For example, applicant types could be POUs and tribes, project developers, third-party program administrators, or a mix.**
    a. One-Stop-Shop (OSS) implementers for different market sectors is critical. Single family (SF) and MF markets are incredibly different, and community solar applies differently to each as well. Tribal Nations often bring on an implementor that is fluent in what is needed to adopt solar in their communities as well.
    b. The OSS model allows the program implementer to manage initial property assessment, design, engineering, procurement, construction management, financing, education and training, and reporting functions for MF customers. The OSS approach is recognized in national studies by the American Council for an Energy-Efficient Economy, the nation's five Regional Energy Efficiency Organizations, and others as the optimal approach to overcome the unique hurdles of delivering green services to different market sectors.

7) **As initially defined by US EPA, LIDAC eligibility will be based on census tract-level data, properties providing affordable housing, and geographically dispersed low-income households that meet area median income (AMI) or Federal Poverty Level thresholds. In cases where household income is used to meet eligibility, what documentation should be required? What are best practices for verifying eligibility for low-income utility programs?**
    a. *Ensuring categorical eligibility for income-driven funding levels.* It is critical to ensure that categorical eligibility is offered for any income-driven/qualified funding levels. The way to do this, as is done with numerous other income-qualifying programs, is to streamline the income eligibility by utilizing rent roll at the property level, instead of at the tenant level. If you use tenant level, then by the time you certify the whole property, there will be two or three units that have turned over already – causing delays in in the project and frustration from the property owner/manager. Utilizing Federal recommendations (such as with the DOE Rebate Programs), and allowing categorical eligibility for MF and MFAH properties, the process of ensuring income qualification is exponentially easier,

and also significantly reduces the chance of tenant/consumer data being accessed.

8) **What are best practices for conducting outreach to LIDAC communities and/or California Native American tribes? How can Community-Based Organizations (CBOs) best assist with outreach?**
    a. *A true "One-Stop-Shop" (OSS) is needed.* Again, ICAST believes that bringing on multiple program administrator for all communities is not the best approach. A true OSS approach will include education and outreach; auditing efforts, cost evals, monitoring energy savings; aggregating home renovation projects; program implementation; and more. Reaching MF/AH, Tribal, and rural LIDACs is a different ballgame than reaching out to SF "market rate" households and communities. And it's not just about making them *aware* of the program, or making sure they *can* access the incentives (likely done in the same manner for everyone). The issue with these LIDACs is whether they have access to the rest of the funds needed, i.e. any matching funds to take advantage of the solar. (E.g., Blanket advertising on TV could make all residents aware of the program and how to access the them, but still would prevent the LIDAC property from accessing them if they do not have access to matching funds or the resources and time to go through the retrofit process). Coordinating funds with other federal/state/local incentives is also critical for MF properties in LIDACs, and having a point-of-contact that can provide the education, staff time, and ability to leverage these funds will create an easier avenue for MF/MFAH, Tribal, and rural communities to take advantage of the incentives. If the customer is getting "thrown around" to four+ groups, then trust breaks down with customers and there is higher chance for critical issues to arise. According to studies by DOE and ACEEE, the best practice to ensure energy efficiency and renewable energy benefits reach LIDACs is through one point of contact using an OSS, where the OSS implementer (administrator) is willing to take the project from idea to completion for the LIDAC clients.
    b. *One MF point of contact to incentivize MF and MFAH property owners.* The most critical program design parameter is that the process is simple, easy to enroll and implement – with minimal bureaucracy. The LI housing staff are not experts in solar, and often have little understanding of electrification or decarbonization requirements. Simply put: They are busy managing a LI housing property that comes with its own problems that keep them more than busy. They are going to

need someone they trust, to hold their hand through the entire process and make it all happen for them. That brings us back to the value of an OSS implementer, who specializes in LI housing, and has the network in that industry so that they are trusted to help electrify these LI properties and install the solar.

9) **Are there challenges or needs that are particular to LIDAC communities or California Native American tribes that CEC should consider to inform program design and structure?**
    a. The barriers to entry for these communities often include lack of staff or member time, skill, and financing understanding – all which can be solved by utilizing an OSS implementor. Barriers of participation often start with caution around project costs and the split-incentive (such as the "what am *I* going to get out of this project?" question that many MF property managers and owners have). Many consumers, especially those lacking disposable income, are already inexperienced and cynical of tax credits and unknown state programs. This can be circumvented by using OSS implementors who are experienced, utilizing highly-trained community organizations, and using workers from these communities.
    b. Additionally, power market barriers exist in the California Tribal market, and stem from the lack of Tribal representation in decision-making processes for state and federal energy policies. This barrier is exacerbated by the absence of effective systems to manage new energy programs effectively, limiting LIDAC's ability to influence and benefit from energy-related initiatives.
    c. There have also been instances in California where capabilities of energy storage systems fell short, most notably due to the recent wildfires – causing CBOs to look towards sustainable, renewable energy solutions and energy storage solutions. Therefore, it is essential that organizations partner with these communities to ensure that energy storage systems are properly functioning in the event of possible unexpected disruptions or emergencies.

10) **What types of technical assistance would help support successful projects benefitting rural, tribal, and other communities that experience access barriers?**
    a. Critical technical assistance is embedded within the OSS model, that can directly alleviate many of the barriers/roadbumps LIDACs experience when adopting solar and BESS:

i. *Ease of access:* An OSS implementor is critical to ensuring that SFA is easily accessible, most notably for MF, Tribal, and rural communities. This offers one point of contact for all, that has a reputable history of leveraging and braiding other funding for projects. OSS implementors should have clear guidance and explicit terms for the program and performance goals in this area.

ii. *Transparency of upfront Costs:* Wherever possible, ICAST recommends a direct pay system rather than a tax credit/general credit, as deeper benefits will be felt in these communities and residences. It reduces the upfront costs for property owners of the existing programs, therefore incentivizing and reducing barriers to implementation.

iii. *Assistance with Braiding/Leveraging Funds:* ICAST recommends that the SFA program explicitly emphasize and offer coordinating and leveraging opportunities – with other available interagency programs. Coordinating different program funds reduces the need for heavy investments from outside parties, while making environmental justice communities far more likely to participate in the program. (Notably because braiding can become exponentially complex as sources of funds increase.) Projects will likely not be able to be paid for fully with financing solely from the SFA program, so co-delivering this program with other financing opportunities will ensure higher rates of success.

b. *Workforce development programs and trainings:* If the SFA program allocates a significant portion of funding to affordable housing and community solar, job training can meet the new apprenticeship requirements for the solar ITC. Contractors of single-family homes are often not required to prioritize workforce development and will are often less incentivized to contribute staff time and resources to building up a community's solar workforce; this results in less individuals impacted by green-economy opportunities. By focusing a significant portion of the SFA Program on affordable housing and community solar, CA can increase the number of individuals in the State's workforce, and even include pathways for these workforce goals to be met by historically underserved individuals in the communities receiving the solar. Additionally, ICAST recommends, and has offered, on-the-job training in underserved communities, as many community organizations have not historically had the bandwidth to train community members in similar ways. Again, an OSS model helps ensure there are workforce training opportunities for local community members –

ensuring that the project gives back to more than just the tenants and property themselves.

c. *Customer Outreach, and Technical Support:* The most critical program design parameter is that the process is simple, easy to enroll and implement – with minimal bureaucracy. Again, LI housing staff are not energy efficiency experts and often have little understanding of electrification or decarbonization requirements. This program could tax some of their current understanding of how mechanical systems work in their property. Simply put: They are busy managing a LI housing property that comes with its own problems that keep them more than busy. They are going to need someone they trust, to hold their hand through the entire process and make it all happen for them. Having technical assistance providers who specializes in LI housing, and has the network in that industry so that they are trusted, will ultimately be the best help for these LI properties.

11) **Certain projects under the Solar for All award will be subject to "Build America, Buy America" domestic sourcing requirements for iron and steel, manufactured products, and construction materials. What, if any, barriers may this cause? How can those barriers be mitigated and addressed?**

a. BABA remains difficult for contractors. For this, program-wide waivers for the solar would be incredible beneficial – which is something some programs have done across the country.

Benefits

12) **As a condition of receiving funding from CEC's Solar for All program, awardees must deliver a minimum 20% average household electricity bill savings to all LIDAC households served under the program, including households in master-metered, multi-family buildings.**

a. **What are best practices to ensure households that do not receive individual electricity bills (e.g. master-metered, multi-family buildings) receive the savings?**

i. Technology solutions such as SolShare can be used to mimic individual meter savings.

b. **How should bill savings be verified? By whom and when?**

i. Modeled and approved by the project implementor.

13) **What process should be used to ensure community solar bill discounts are linked with the customer even if the customer moves to a new location within the same service territory?**
    a. Although this is largely a SF issue, ICAST recommends that CS should target LI MF and be linked to the unit and not the individual. That way you can verify savings to linked units, tenants do not need to be chased, all saving on administrative costs and ensuring a deeper level of consumer protections.

Consumer Protection

14) **What existing consumer protections are currently provided by residential solar, community solar, and energy storage programs?**
    a. Utilizing Federal recommendations (such as with the DOE Rebate Programs), and allowing categorical eligibility for MF and MFAH properties, the process of ensuring income qualification is exponentially easier, and also significantly reduces the chance of tenant/consumer data being accessed.

15) **How should the CEC Solar for All program incorporate consumer protection requirements? Are there consumer protection considerations particular to different housing types such as multi-family or single-family rental properties, or for LIDAC communities, that CEC should consider?**
    a. By qualifying the whole of a low-income MF and affordable housing properties the state does not need to access individual tenant information – therefore further protecting its dissemination. Therefore ICAST recommends that CA qualifies whole-properties as often as it can.
    b. Additionally, ICAST recommends only contracting qualified contractors, and having an established network of them; doing so will limit the potential of unqualified contractors who may misuse funding.

Quality Jobs

16) **How can awardees support high-quality jobs for solar and energy storage projects that promote prevailing wage and training opportunities such as apprenticeship programs? What other workforce development, education, and training opportunities are available that should be required/encouraged by CEC's Solar for All program?**

a. If the SFA Program allocates a significant portion of funding to affordable housing and community solar, job training can meet the new apprenticeship requirements for the solar investment tax credit. Contractors of SF homes are often not required to prioritize workforce development and will are often less incentivized to contribute staff time and resources to building up a community's solar workforce; this results in less individuals impacted by green-economy opportunities. By focusing a significant portion of the SFA Program on affordable housing and community solar, California can increase the number of individuals in the State's workforce, and even include pathways for these workforce goals to be met by historically underserved individuals in the communities receiving the solar.

17) What are best practices for estimating or reporting on the job opportunities for solar and energy storage projects that should be incorporated in CEC's Solar for All program?

a. It is critical to now that different markets generate jobs differently, and that there is an inherent difference between quality and quantity.
b. However, for larger-scale solar over 1MW that are going to collaborate with DOL and contractors for job estimates, numbers should be easy to generate as these projects are likely going to abide by the apprenticeship requirements. Therefore, they will know how many jobs it will create through the apprenticeships.

18) What other workforce criteria should be considered as part of the CEC Solar for All program?

a. Workers need paid training and certifications. Most of these high demand jobs will require higher skill, and thus training. The reason it needs to be paid is because most underserved occupations do not have the luxury of spending extensive time on training that does not provide a stipend or wage.
b. An additional problem ICAST sees is that the contractors who need additional staff don't also have the bandwidth to train someone; instead they seek to hire previously-trained workers. This is where the ultimate dilemma lies in regard to providing on-the-job training. What we have found works for us is that ICAST acts as trainers and provides the classroom training. We then place our trainees on our own projects. The trainees are in essence "pushed" onto the contractors, but with help from 3rd party supervisors (such as site supervisors), there is a

reduced impact on the contractors. We have found that once these contractors see trainees performing well on-the-job, they often choose to hire them.