GRID ALTERNATIVES
Greater Los Angeles

Climate Action Reserve
818 W. 7th St., Suite 710
Los Angeles, California 90017

July 11, 2019

Re: Comments on "Solar PV Forecast Methodology v. 1.0 (draft)" under Climate Forward

Dear Climate Action Reserve,

Thank you for the opportunity to provide comments on the draft Solar PV Forecast Methodology v. 1.0 under Climate Forward (the Methodology). As the non-profit solar installer that installed systems on 24 homes as a pilot project, we believe that we have a unique insight on the impacts of the Methodology as both the installer and the direct liaison with the communities that should benefit from these services.

Grid Alternatives Greater Los Angeles strives to provide access to renewable energy to low income families living in our region's most disadvantaged communities, ones that are too often left behind when it comes to new technologies, such as those that generate renewable energy. Moreover, we believe as a matter of environmental justice that these families and communities that have carried the burden of pollution from power plants, dumps, freeways, and more, deserve to be at the front of the line for new clean energy technology. We help do this by utilizing state, utility and philanthropic funding to offer no-cost PV solar panel technology to qualified families while training people from the same neighborhoods in solar panel installation, so that they can be part of this growing clean tech workforce. We have a proud track record of success in Los Angeles, placing over 500 people in solar jobs while installing over 1650 systems, totaling nearly six megawatts.

One of the main hurdles we face in Los Angeles in fulfilling our mission is the poor quality of roofs on low income homes. Over the last several years we've had to turn down hundreds of families from our program because their roof was not in good enough condition for solar and unfortunately the families usually lacked the funds or the credit to get a re-roofing job done. In the initial project implemented under the pilot methodology, along with our partners, Grid Alternatives Greater Los Angeles helped 24 families in Los Angeles County receive a new cool roof and go solar and saving them thousands of dollars a year that they can now devote to food, medicine, education and other essentials. At this point, after months of outreach work, we have already identified, site visited and taken applications from an additional 35 families who are hoping to benefit from these services under the pilot program as well.

We fully support the Methodology and Climate Forward more generally, as it provides a framework that will incentivize action now to reduce greenhouse gas emissions in the future.

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We are particularly supportive of the fact that this Methodology can be applied in disadvantaged communities that are most vulnerable to the impacts of climate change and pollution. However, given our experience "on the ground" implementing solar PV projects, we would like to provide the following comments to strengthen the Methodology in ways that will allow more struggling homeowners to benefit from and participate in Climate Forward. These suggestions would incentivize other Project Proponents to participate in Climate Forward and expand the impact of PV solar installations by GRID and other organizations.

Performance Guarantees

Our first proposed improvement is with the suggested requirement of a "performance guarantee." This new guarantee is not defined in the Methodology and its vagueness undercuts its intended purpose. In our installations, the PV solar systems are "guaranteed" by our contracts to provide basic maintenance on any system that malfunctions. We do not have, nor offer, a traditional performance guarantee (*i.e.*, a production guarantee). The PV solar systems that we installed are monitored through the microinverters installed. Additionally, we provide certain warranties (workmanship, equipment, etc.) to ensure we are providing our families with quality installs and peace of mind that their system works and will continue to work.

To completely guarantee production, would mean a costly comprehensive maintenance program including panel washing, tree trimming, etc. would be required to ensure that the system is performing optimally. Based on our partner Climate Resolve's understanding, that requirement is also known in the industry as a "production guarantee," which would typically guarantee 85-95% of the projected annual output of the system. Under the Methodology, not only would additional costs be incurred to provide a production guarantee, but also to cover any lost production below the guaranteed amount. As a nonprofit operating with little margin already, we would have to charge a considerable amount to implement and provide these guarantees to a Project Proponent. We feel that providing the system production and guaranteeing that the system is functional through existing warranties and monitoring suffices to ensure the PV solar project's resiliency. Moreover, in our experience, performance guarantees are not customary for customers that are not entering into a Power Purchase Agreement (PPA) in connection with their systems (which is the case for most of our installations) and normal PV solar installation contractors do not provide PPAs if no larger funder like Sunrun, Sunpower, or Tesla is involved that needs the guarantee in part because of rules around the syndication of the Investment Tax Credit.

Moreover, California's Single-family Affordable Solar Housing (SASH) already provides safeguards to ensuring that PV solar systems operate as designed. Under SASH, we are required to design and install systems that "meet a minimum performance requirement, which is 85% of the Design Factor (DF) based on a modified Estimated Performance Based Buydown (EPBB) calculation." We not only comply with the design and performance parameters, but there are also a series of random inspections that verify these requirements including "System size and nameplates of equipment used; design considerations: tilt, azimuth, standoff height, shading

analysis; 85% Design Factor, minimum requirement; address and location of system; operability; on-site inverter production reading" before issuing funding. (CPUC's SASH Handbook for "SASH 2.0" program under reauthorized funding from AB 217)

We respectfully ask that you remove this requirement from the Methodology. To our knowledge, this is not a requirement for any state-funded solar program and is infeasible with which to comply without incurring additional considerable costs. We feel that other best practices and system monitoring is more than enough to ensure that the systems are and will remain properly functioning.

One-Year Confirmation Delay

Our second proposed improvement/suggestion is with respect to the proposed one-year delay of confirmation activities after installation. Under this Methodology, there will be significant delays between the installation of PV solar project batches due to the uncertainty and extended investment horizons for Project Proponents. In our case, and we suspect others as well, this will reduce our ability to install PV solar projects at more homes and meet our mission. In our experience, if there is an issue with the system, we will know within the first month or two after interconnection when the homeowner gets their first new bills. Rarely does an issue arise outside of this timeframe. A delayed confirmation period will deter funders, investors and Project Proponents from investing in a project such as that contemplated in the Methodology that is seeking to serve our target communities. It is our recommendation to shorten the timeframe from one year to three months from permission to operate from the utility to confirm and issue forecasted mitigation units (FMUs).

Regulatory Compliance Language- Section 3.5

Our last proposed improvement/suggestion relates to Section 3.5 and the verbiage surrounding potential disqualification of issuing the credits. This requirement is not necessary. We already fully comply with local AHJ/city requirements, NEC requirements and OSHA. The validity of the system's potential production (and therefore greenhouse gas reductions) is determined by finalizing the permit issued by the AHJ/city and receiving Permission to Operate (PTO) from the utility. There are no other factors that should affect the issuance of FMUs. Any extraneous "issues/violations" will result in fines for the installer but will not affect the project or its anticipated greenhouse gas reductions. We recommend that you remove this requirement or change the verbiage to state that "*no laws that could impact the GHG reductions from such project have been broken*" (or similar).

Thank you again for providing us the opportunity to submit these comments as part of the public comment period for the Methodology. We are highly motivated to help strengthen the Methodology, so more potential funders can participate in Climate Forward and expand our ability to provide renewable energy to families in disadvantaged communities. We are still hoping to serve another 35 deserving families this year and would love to help even more in 2020 and beyond. A methodology strengthened through the incorporation of our comments will

help us reach this goal. We would be happy to discuss our comments further with your team and be a thought partner in improving the Methodology on an ongoing basis.

Best regards,

Michael Kadish
Executive Director